NATIONAL HEALTH SERVICES STANDARDS (NHSS)

for Bangladesh

January 2025

DIRECTORATE GENERAL OF HEALTH SERVICES (DGHS)
MINISTRY OF HEALTH AND FAMILY WELFARE (MOHFW)
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

World Health Organization
Bangladesh

(বিদেশি সংস্থা জড়িত থাকায় ইংরেজিতে লেখা হয়েছে)

Government of the People's Republic of Bangladesh
Ministry of Health and Family Welfare
Health Services Division
World Health-2 Branch
www.hsd.gov.bd

Memo No.: 45.00.0000.169.22.044.25-511 Date: 20 November 2025

Subject: Administrative Approval of the "National Health Services Standard for Bangladesh"

Reference: Letter No. 45.01.0000.000.006.85.0001.21.44 dated 09 March 2025 from the Director (Planning & Research), Directorate General of Health Services.

With reference to the subject and the letter cited above, it is hereby informed that the "National Health Services Standard for Bangladesh" has been duly approved by the Ministry of Health and Family Welfare.

02. All concerned are hereby requested to take necessary follow-up actions in this regard.

Enclosure: As stated.

20/11/2025

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ACRONYMS

AC	Anterior Chamber
ACR	Albumin to Creatinine Ratio
AEFI	Adverse Effects Following Immunization
AFB	Acid-Fast Bacillus
AMC	Alternate Medical Care
ARI	Acute Respiratory Infection
ASO	Antistreptolysin O
BEmONC	Basic Emergency Obstetric And Newborn Care
BRAC[1]	Building Resources Across Communities
BT	Bleeding Time
BUN	Blood Urea Nitrogen
CBC	Complete Blood Count
CC	Community Clinic
CCP	Cyclic Citrullinated Peptide
CCTV	Closed-circuit television
CCU	Coronary Care Unit
CD	Communicable Disease
CEMONC	Comprehensive Emergency Obstetric and Newborn Care
CG	Community Group
CHCP	Community Health Care Providers
COPD	Chronic Obstructive Pulmonary Disorder
COVID-19	Coronavirus Disease 2019
CPR	Cardiopulmonary Resuscitation
CRP	C-Reactive Protein
CSG	Community Support Groups
CT	Computed Tomography
CVD	Cardiovascular Diseases
DCR	Dacryocystorhinostomy
DGHS	Directorate General of Health Services
DGFP	Directorate General of Family Planning
DGNM	Directorate General Nursing and Midwifery

[1] BRAC, originally Bangladesh Rural Advancement Committee, is now internationally known as Building Resources Across Communities to reflect its global mission.

DH	District Hospital
DHIS2	District Health Information System software version 2
DM	Diabetes Mellitus
DMPA	Depot Medroxyprogesterone Acetate
DNS	Deviated Nasal Septum
DOTS	Directly Observed Treatment, Short-Course
ECG	Electrocardiogram
ECT	Electroconvulsive therapy
EEG	Electroencephalogram
ELISA	Enzyme-Linked Immunosorbent Assay
EMR	Electronic Medical Record
ENT	Ear, Nose and Throat
EPI	Expanded Immunization Programme
ESP	Essential Health Services Package
ESR	Erythrocyte Sedimentation Rate
ETT	Exercise Tolerance Test
FNAC	Fine Needle Aspiration Cytology
FP	Family Planning
FT3	Free Triiodothyronine
FT4	Free Thyroxine
FWA	Family Welfare Assistant
GBV	Gender-Based Violence
GH	General Hospital
GoB	Government of Bangladesh
HA	Health Assistant
Hb	Haemoglobin
HbA1c	Hemoglobin A1C
HBV	Hepatitis B Virus
HBsAg	Hepatitis B Surface Antigen
HCV	Hepatitis C Virus
HDC	Hill District Council
HDL	High-Density Lipoprotein
HIQA	Health Information and Quality Authority
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HPV	Human Papilloma Virus
HR	Human Resource

HSD	Health Services Division
HSM	Hospital Services Management
ICU	Intensive Care Unit
IEC	Information, Education Communication
IFA	Iron, Folic Acid
IgG	Immunoglobulin G
IgM	Immunoglobulin M
IMC	Integrated Management of Childhood Illness
IPD	In-Patient Department
IUD	Intrauterine Device
IYCF	Infant Young Child Feeding
KMC	Kangaroo Mother Care
LAN	Local Area Network
LBW	Low Birth Weight
LDL	Low-Density Lipoprotein
LGD	Local Government Division
LLIN	Long-Lasting Insecticides Nets
LMICs	Low and middle-income countries
M&E	Monitoring and evaluation
MCH	Medical College Hospital
MCHTA	Ministry of Chittagong Hill Tracts Affairs
MCWC	Maternal and Child Welfare Centres
MDT	Multi Drug Therapy
MEC	Medical Eligibility Criteria
MoHFW	Ministry of Health and Family Welfare
MoLGRD&C	Ministry of Local Government, Rural Development and Cooperatives
MP	Malarial Parasite
MR	Menstrual Regulation
MRI	Magnetic Resonance Imaging
MSR	Medical Supplies Requisite
MT	Mycobacterium Tuberculosis
MWM	Medical Waste Management
NCD	Non-Communicable Disease
NGO	Non-Governmental Organization
NHSS	National Health Service Standards
NIPORT	National Institute of Population Research and Training
NS1	Non-Structural Protein 1

NSI	Needle-Stick Injuries
OBT	Occult Blood Test
OCC	One Stop Crisis Centre/Cell
OGSB	Obstetrical and Gynaecological Society of Bangladesh
OPD	Out-Patient Department
OPG	Orthopantomogram
OPM	Oxford Policy Management
ORIF	Open Reduction and Internal Fixation
ORS	Oral Rehydration Salts
OT	Operation theatre
PAC	Post-Abortion care
PBF	Peripheral Blood Film
PCV	Pneumococcal vaccine
PHC	Primary Health Care
PID	Patient ID Number
PP	Post Partum
PPH	Post Partum Haemorrhage
PPE	Personal Protective Equipment
PPP	Public-Private Partnership
QIS	Quality Improvement Secretariat
QoC	Quality of Care
RA	Rheumatoid Arthritis
RCT	Root Canal Treatment
RD	Rural Dispensary
RDT	Rapid Diagnostic Test
R/E	Routine Examination
Rh	Rhesus
RMO	Resident Medical Officer
RMNCAH	Reproductive, Maternal, Neonatal, Child and Adolescent Health
RPR	Rapid Plasma Regain
RP	Resident Physician
RS	Resident Surgeon
RT PCR	Reverse Transcription-Polymerase Chain Reaction
SACMO	Sub-Assistant Community Medical Officer
SAM	Severe Acute Malnutrition
SBCC	Social and Behaviour Change Communication
SDG	Sustainable Development Goals

SEARO	South-East Asia Regional Office (World Health Organization)
SGPT•	Serum Glutamic Pyruvic Transaminase
SGOT	Serum Glutamic-Oxaloacetic Transaminase
SHR	Shared Health Record
SOSB	Society of Surgeons Bangladesh
STI	Sexually Transmitted Infections
STEMI	ST-elevation myocardial infarction
TAC	Technical Advisory Committee
TB	Tuberculosis
TPHA	Treponema Pallidum Hemagglutination
TSH	Thyroid-Stimulating Hormone
UNICEF	United Nations Children's Fund
UHC	Universal Health Coverage
UHCC	Urban Health Care Centre
UH&FWC	Union Health and Family Welfare Centers
UH&FPO	Union Health and Family Planning Officer
UHMC	Upazila Hospital Management Committee
ULB	Urban Local Body
UNO	Upazila Nirbahi Officer
UP	Union Parishad
UPS	Uninterruptible power supply
USAID	United States Agency for International Development
USC	Union Sub-Centre
UTI	Urinary Tract Infections
UzHC	Upazila Health Complex
VIA	Visual Inspection with Acetic Acid
VDRL	Venereal Disease Research Laboratory
WC	Working Committee
WHO	World Health Organization

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1 INTRODUCTION

1.1 BANGLADESH HEALTH SCENARIO

Bangladesh has an estimated population of 165 million people living in a territory of 147,570 square kilometres, making it one of the most densely populated countries in the world (BBS, 2022). Bangladesh has achieved impressive gains in population health, by reaching the Millennium Development Goal 4 target of reducing under-five child mortality by two-thirds between 1990 and 2015, and improving other key indicators such as maternal mortality, immunization coverage, and survival rates from malaria, tuberculosis, and diarrhoea diseases (WHO, 2015).

Despite the progress, Bangladesh is yet to attain universal health coverage, as many systematic gaps remain. Due to epidemiological and demographic change, Bangladesh is facing the double burden of communicable and noncommunicable disease (NCD) including the emergence and re-emergence of other disease, placing demand for more resources on an already strained health system (WHO, 2015). The primary healthcare system is crucial in mitigating the increasing prevalence of NCDs due to its nationwide infrastructure, broader service coverage, and cost-effective interventions. (Kabir, et al., 2023). Approximately 70% of the population in Bangladesh rely on the primary healthcare system to seek treatment and care. In addition, Bangladesh's climate is becoming increasingly conducive to the spread of dengue and other vector-borne illnesses like chikungunya and malaria because of excessive rainfall, flooding, waterlogging, temperature increases, and strange changes in the nation's traditional seasons (WHO, 2023).

Health Systems Structure and Governance in Bangladesh

Over 50 years after independence, Bangladesh's health system has undergone multiple reforms and over time established an extensive pluralistic health system, with four key actors that define the structure and function of the system: government, private sector, nongovernmental organizations (NGOs) and donor agencies.

The government, or public sector, is the first important actor and is constitutionally tasked with overseeing policy and legislation and regulation of delivery of all health services, including the funding and recruitment of medical personnel. Within the government, there are two main ministries and relevant divisions involved in health care delivery. The highly centralized health system has the Ministry of Health and Family Welfare (MoHFW) responsible for overseeing, managing, and regulating health, family planning and nutrition programmes across the nation with limited authority delegated to local levels. It is responsible for defining health policies, setting strategies, establishing technical standards, controlling quality, enforcing regulations, as well as procuring and distributing vaccines, family planning (FP) contraceptives, and other essential commodities.

The two directorates under the MoHFW, namely the Directorates General of Health Services (DGHS) and Family Planning (DGFP), operate a dual system of general health and family planning services through an extensive network of facilities and health personnel, in addition to separate and unique reporting systems for each directorate. Family planning services are usually administered and provided separately from DGHS services, using different health workers and facilities at all levels of the system.

As the MOHFW directly oversees primary healthcare (PHC) facilities in rural areas, the Ministry of Local Government, Rural Development and Cooperatives (MoLGRD&C) holds the

responsibility for the provision of urban primary healthcare services. It comprises of two divisions: Local Government Division (LGD) and the Rural Development and Cooperative Division (RDC). The Local Government (City Corporation) Act 2009 states that the Corporation is responsible for health system of the City while the Local Government (Municipality) Ordinance 2010 states that the Municipality is responsible for health of the Municipality. All the City Corporations and Municipalities are affiliated with (not under) Ministry of Local Government, Rural Development and Cooperatives. As the LGD (Municipalities and City Corporations) is responsible for all urban local bodies (ULB) which carry the legal and administrative mandates for carrying out public responsibilities, including primary health care service delivery; the MoLGRD&C, through LGD provides the ULBs with the required budget and management support from the central government.

In contrast to the country's rural areas, Bangladesh's urban areas lacks a robust public sector primary health care network system. This coupled with rapid urbanization, the government and external funding agencies have started addressing urban PHC effectively during the last few decades through partnership among urban local bodies (ULB) and Non-Government Organizations (NGO) in the collaborative provision of public and environmental health as well as PHC services in urban areas.

The Ministry of Chittagong Hill Tracts Affairs (MCHTA) is a less known ministry also involved in health care service delivery in the Chittagong Hill Tracts. According to the Bandarban/ Khagrachari/ Rangamati Hill District Council Act, 1989, health department is transferred to the respective hill district council (HDC). Thus, providing health services to the district dwellers is the responsibility of the respective HDC. All the three HDCs are under the Ministry of Chittagong Hill Tract Affairs.

To extend provision of health care services across the nation by complementing the Government's limited capacity and resources, the **private sector** has established a network of facilities across the formal and informal sectors. The formal sector, concentrated in urban areas, provides both western and alternative medicine (Unani and Ayurvedic) services through a range of facilities from hospitals to clinics, laboratories and drug stores; while the informal sector is the principal provider in rural areas, including mostly untrained providers of allopathic, homeopathic and alternative (Kobiraj) medicine (WHO, 2015). The private health sector in Bangladesh includes large and small commercial companies, professionals (i.e., doctors and individual providers), and informal providers. The private sector includes health services provided at hospitals and clinics; clinics operated by doctors, nurses, midwives, and paramedical workers; diagnostic facilities (i.e., laboratories and radiology units); and the sale of drugs from pharmacies, as well as unqualified static and itinerant drug sellers (NIPORT, 2020).

The **NGO sector,** considered as the 'third sector' in health care has emerged, to ensure health care particularly for the poor segment of the population. With donors providing considerable and growing amounts of funds to NGOs, their influence is expanding, hence, there are many partnerships between government and NGOs in the areas of financing, planning, service delivery, capacity building, and monitoring and evaluation that have produced some health gains (WHO, 2015). The GOB encourages the involvement of NGOs in delivering services that address the country's health challenges. More than 4,000 NGOs, including international organizations (i.e., CARE, Save the Children and World Vision), large national NGOs (Building Resources Across Communities (brac), Concerned Women for Family Development, and the Grameen Kalyan Health Program), and hundreds of small, local NGOs are active in the health sector in Bangladesh. The NGOs provide essential primary health care services through a nationwide network of static clinics, satellite clinics, and community service providers (NIPORT, 2020)

Health Information System

In 2008, the government of Bangladesh set the goal of transforming Bangladesh into a middle-income country devoid of poverty with Vision 2021. This included the provision of universal access to healthcare and digitising the country through the motivating idea of **'Digital Bangladesh by 2021'** – a call to action to mainstream information technology in all areas of the society including health care.

The operation of the web based software, District Health Information System (DHIS, version 2) to collect, validate, analyse and present routine health data from the government health facilities of Bangladesh began in 2011 and currently, Bangladesh is the largest DHIS2 deployer in the world with an average reporting rate of 98% (DGHS, 2023). Routine health information is now available in a timely manner, in a format accessible to all (UNICEF, 2015). The system now connects central, divisional and district levels with sub-district health facilities and over 14,272 community clinics (DGHS, 2024), where it collects and stores aggregated summary data monthly. Furthermore, DHIS2 has been a vehicle for data systems improvement and other areas of health systems strengthening overall.

In 2015, the National Telehealth Service, Shastho Batayon, was launched with a linkage to the existing health system, catering to the health care needs of people on-demand (Padmanaban & Udayasankaran, 2021). The platform provides additional services including ambulances, health information, receiving and resolving complaints about public health sector facilities, and coordinating emergency health responses.

Alongside, the country is developing and piloting an ambitious shared health record (SHR) to create a national electronic archive for patients to access medical records anywhere, anytime. Like DHIS2, the country has chosen OpenMRS, an open-source electronic medical record (EMR) solution. Under SHR system, patients will get unique digital IDs which will be used to store the patient's history of diseases, doctors' appointments, treatments, and the records will be shared across hospitals (Saif & Tajmim, 2023). An online appointment system will also be launched for patients and telemedicine activities will be strengthened. Health experts suggest inclusion of private hospitals in the SHR system. Here, Bangladesh can work within its all-encapsulating 'national IDs'.

Over the years, the DHIS2 has developed as an overarching platform to aggregate information from contrasting health information system initiatives and make this data accessible by both data producers and users. It is essential for all data systems to be compatible with DHIS2 through an interoperability framework that facilitates effective coordination and collaboration among MOHFW and its partners. Proper tracking and analysis of health records and data will allow escalation of cases for referral.

Referral System

Currently, there is no structured referral system, linking hospitals and health facilities across the multiple tiers of the health system. A referral system would ensure quality of services, reduced cost, and reduce patient load at tertiary hospitals which is to treat critical and emergency patients and mitigate the burnout of specialist doctors if the primary care has a referral system. For Bangladesh to achieve Universal health coverage (UHC) by 2030, it will require intensifying primary healthcare (PHC) services.

Administrative Units

Bangladesh is governed by a Parliamentary Form of Government. The President is the head of the State while the Prime Minister is the head of the Government. For the convenience of administration, the country is divided into eight administrative divisions. Each division is further divided into districts (zilas) with a total of 64 districts. Each district is further divided into upazilas with a total of 495 Upazilas (Sub district) and then upazilas are divided into unions with a total of 4,671 unions (several wards consist of a Union) and 40,977 wards (few villages consist of a Ward), and 87,310 villages (a2i, 2023) (DGHS, 2022) (Kabir, et al., 2021). Union is the lowest administrative unit of the local government. The city corporations and municipalities are designated as urban areas, with 12 city corporations and 324 municipalities across the country (DGHS, 2022).

Health Service Delivery Organizational Structure

In the government system of health care, health services are provided through tiered system: at national level by specialist institute hospitals where a wide range of specialized and superior laboratory facilities are available; at tertiary level by medical colleges hospitals; at secondary level health care is provided through the district hospitals; and at primary health care level through a three-tiered PHC system (upazila, union, and ward level) established to serve primarily the rural population, with a limited number of Government Outdoor Dispensaries based in cities to serve the urban population.

Primary and ambulatory care is provided by the public network of facilities, including the community clinics as well as by formal and informal private providers, and NGOs. In urban areas, patients typically seek ambulatory care at the outpatient units of the major urban hospitals.

The primary healthcare system is established at the sub-district level and below where a range of public and privately-operated healthcare facilities are functioning.

- Community Clinic (CC) is the lowest level of static public healthcare facilities located at the ward level which provide outpatients promotive and preventive care.
- The Government Outdoor Dispensary is the lowest level of static public healthcare facilities in the urban areas
- Under the DGHS, the union-level facilities consisting of 'Union Health and Family Welfare Centers (UH&FWC),' 'Rural Dispensaries (RD)' and 'Union Sub-Center' are set up at the Union level which provide outpatient promotive, and preventive care.
- Under the DGFP, the union-level facilities include the Maternal and Child Health Centre (MCWC) and Union Health and Family Welfare Centers (UHFWCs).
- Upazila health complex (UzHC) is the first-level public hospital mostly located in the headquarter of the sub-district which provides promotive, preventive, curative, and rehabilitative care, for both inpatients and outpatients.
- The private facilities (for-profit) at the Upazila level are mostly focused on curative care; while the NGO facilities (not-for-profit) are focused on basic primary healthcare (Kabir, et al., 2021).

Secondary and tertiary healthcare facilities provide more advanced or specialty care than the primary healthcare facilities at the ward, union and upazila levels. The district hospitals are usually termed secondary hospitals as these have fewer facilities for specialty care compared to many in the medical college hospitals. Dhaka division has the highest number (48) of secondary and tertiary hospitals, followed by Chittagong, Khulna and Rajshahi division. Many people by-pass lower tiers of the health system preferring to seek initial care from the district hospitals where they are more likely to be seen by a medical doctor and where drugs and supplies are more available (MoHFW, 2023).

Figure 1: Health service delivery organisational structure in Bangladesh

Source: OPM Consultants

Table 1: Brief description of DGHS health facilities across the multiple tiers of health care

PRIMARY LEVEL: WARD LEVEL

Rural area: Community Clinic

The community clinics program was initiated in 1998 to expand the reach of universal primary health care to rural communities from a static community-based facility. One CC was established to serve health care services to about 6,000-8,000 rural people in each old ward (the sub-union tier). Community clinics are constructed on land donated by individuals of the community while the construction of the facility, procurement of medicines, logistics, and payment of staff salaries are met from the government funds. Currently there are the moment 14,272 community clinics in operation across Bangladesh (DGHS, 2024).

Community clinics provide outpatient services only including health, family planning, and nutrition counselling in addition to selective free medications. These health services essentially are comprehensive reproductive health care for expectant women and include antenatal, perinatal, and postnatal services, in addition to symptom-based first aid (for wounds, fever etc.) and limited curative care.

PRIMARY LEVEL: CITY CORPORATION LEVEL

Urban area: Government Outdoor Dispensary

Government Outdoor Dispensaries (GOD), also known as urban dispensaries, are urban facilities located mostly in the divisional cities. There are currently 35 Government Outdoor Dispensaries – 17 in Dhaka (North and South) City Corporations, 9 in Chattogram City Corporation, 3 in Rajshahi City Corporation, 3 in Khulna City Corporation, and 1 each in Sylhet City Corporation, Dinajpur and Nilphamari municipalities. In the 5th Health, Population and Nutrition Sector Programme 2024-2029, the government has plans to make more such facilities function (through various modalities) in all the city corporations and district municipalities. As the current name implies, these facilities provide out-patient services. The government decided to operate these facilities in two shifts.

Table 1: Brief description of DGHS health facilities across the multiple tiers of health care

These facilities contribute to the delivery of primary healthcare, offer basic medical care, preventive services, and health education to address the healthcare needs of urban communities. The Government Outdoor Dispensaries are part of the broader urban health infrastructure and are aligned with the National Urban Health Strategy of Bangladesh.

PRIMARY LEVEL: UNION LEVEL

Union level: Union Sub-Centre (USC)/ Rural Dispensary (RD)/ Union Health and Family Welfare Center (UH&FWC)

Union Sub-Centres (USCs), Rural Dispensaries (RDs), and Union Health and Family Welfare Centers (UH&FWCs) serve as union level healthcare facilities under the DGHS. There are 1312 USC/RD and 87 UH&FWC belong to the DGHS (DGHS, 2022). These facilities provide out-patient services. For many in the rural areas, these facilities are often the first point of contact. The DGFP also has 3,290 UH&FWC and 212 Maternal and Child Welfare Centres (MCWC) at union level. The NHSS is proposed for DGHS facilities only.

UPAZILA LEVEL

Upazila Health Complex

The UHC plays a vital role in addressing the healthcare needs of the community, providing services such as outpatient care, inpatient care, maternal and child health services, emergency care, and treatment for various diseases and health conditions. It is an integral part of the efforts to improve the quality of healthcare services and ensure equitable access to healthcare for all individuals, particularly in underserved and vulnerable populations. Among the existing 429 UzHC, 11 are 10-bed, 52 are 31-bed, 358 are 50-bed and 8 are 100-bed (DGHS, 2024).

DISTRICT LEVEL

District and General Hospitals

District and General Hospitals provide primary and secondary healthcare through the outpatient, inpatient services, and emergency departments. There are 60 DHs across the country with nearly every district having at least one (DGHS, 2024). In some districts, the hospitals are referred to as 'general hospital' or '250-bed hospital'. These facilities serve as referral centers for primary-level healthcare facilities and deliver secondary-level care. They also offer treatment for non-communicable diseases and various specialized services, such as cardiac, neurological, and orthopaedic care.

Medical College Hospital

Medical college hospitals are affiliated with their respective medical colleges and contribute significantly to the training of future healthcare professionals and the provision of medical care to patients. There are 16 medical college hospitals (DGHS, 2022). The 16 medical college hospitals have varying bed capacities: one with 2,600 beds, one with 1,313 beds, one with 1,200 beds, three with 1,000 beds, two with 900 beds, one with 850 beds, and seven with 500 beds. Medical College Hospitals are located at the regional level, typically serving multiple districts, and offer specialized care across various disciplines. These facilities are commonly referred to as tertiary hospitals.

NATIONAL LEVEL

Specialized Institute Hospitals

Super-specialty hospitals at the national level or centers that provide high-end medical services in a specific field are also considered tertiary hospitals. There are 17 public specialized hospitals where all are based in Dhaka except for the Pabna Mental Hospital which is based in Pabna (MoHFW, 2023).

1.2 RATIONALE FOR DEVELOPING THE STANDARDS

The cornerstone of Bangladesh's commitment to universal health coverage (UHC) is the set of essential health services package (ESP), needed to prevent disease, promote health, and manage illness, that the government has identified, and the primary health care (PHC) system is the foundation that ensures its implementation. The government is one of the main actors involved in PHC delivery, the others being the private sector, nongovernmental organizations (NGOs or non-profit private organizations), and development partners. In this constrainedly regulated health sector, Bangladesh's PHC system is centralized in terms of management structure, organizational hierarchy, resource allocation and staff deployment which affects the health-seeking behaviour, and sociocultural traits of the population (Kabir, et al., 2021).

In 2016, the Quality Improvement Secretariat (QIS) under the Health Economics Unit of the MoHFW developed the "National Health Care Standards" for Primary, Secondary & Tertiary level hospitals. The standards covered five main areas: management; service delivery, support services including laboratory. radiology and pharmacy services; infection control and waste management, and safety. As the development of national health care standards was not within the mandate of the HEU and DGHS did not endorse the document, the implementation was limited. Thus, the DGHS took a fresh initiative for developing the NHSS which encompassed larger dimensions than the National Health Care Standards prepared by QIS.

Currently, there are no comprehensive national health services standards for public health facilities in Bangladesh, and at present there is no all-encompassing standardized, government-recommended service delivery manual in the public or private health sector. Therefore, a standard that can be used in all public health care facilities is needed for public health systems to deliver effectively. Once developed, standards need to be revisited periodically, so that they continue to be relevant for meeting health programme requirements.

1.3 VISION

To achieve Universal Health Coverage and SDG 3.8 to which the GoB is committed through primary health care approach, the NHSS will provide the necessary foundation.

1.4 MISSION

The NHSS will ensure optimum level of health services required for achieving UHC and SDG 3.8 at different tiers of DGHS facilities.

1.5 OBJECTIVES

1. To specify the optimum services to be provided at different levels of public health facilities under DGHS.
2. To provide standards on fourteen components which include Promotive and Preventive Services, Curative Care Services, Diagnostic Services, Pharmacy Services, Referral services, Human Resources for Health, Medicines, Equipment, Other logistics, Digitalization/Information Technology, Physical/Infrastructure Facilities, Infection Prevention and Medical Waste Management, Management and Health and Safety.

1.6 SCOPE AND LIMITATIONS

NHSS contains the recommended list of services, however the different facilities are at different levels. This may require some time to attain the optimal level of services required for effective health care delivery.

The NHSS will focus on only the multiple tiers of health care infrastructure under the DGHS namely the ward, union, upazila (subdistrict), and district as these are providing or supporting the provision of primary health care. The exact facilities include:

- NHSS Volume 1A: Community Clinics
- NHSS Volume 1B: Government Outdoor Dispensary
- NHSS Volume 1C: Union Sub-Center (USC)/Rural Dispensary (RD)/ Union Health And Family Welfare Center (UH&FWC)
- NHSS Volume 2: Upazila Health Complex
- NHSS Volume 3: District or General Hospital
- NHSS Volume 4: Medical College Hospital

Hence, the NHSS does not include services standards for health facilities under the DGFP, private sector and those operated by the NGO.

The DGHS facilities providing inpatient care have multiple bed strengths currently, hence the NHSS proposes a standard for each.

Telemedicine has not been explored in developing the standards as it was beyond the scope of the assignment.

1.7 GUIDING PRINCIPLES

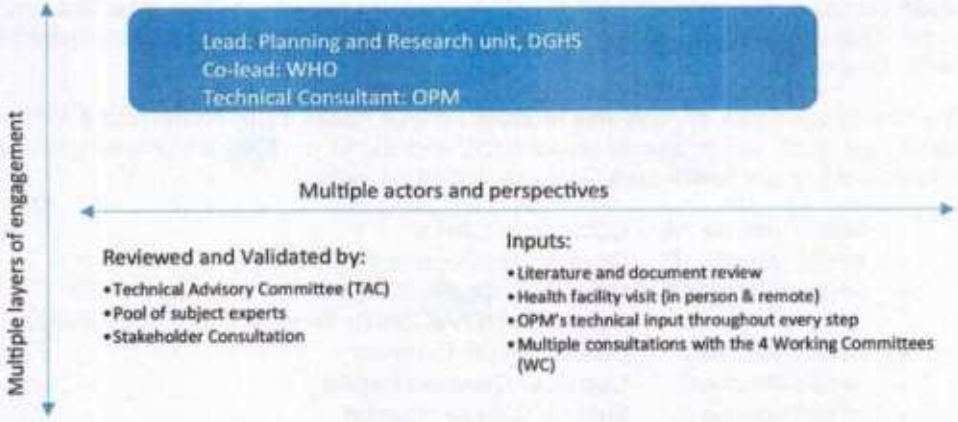
1. The standards mentioned in the NHSS are developed through a participatory process of all relevant stakeholders. Therefore, all concerned authorities need to take appropriate actions to ensure the standards at different facilities.

2. In case of new facility or upgradation of existing facilities, concerned authorities need to be guided for their decisions as per the NHSS.

2 METHODOLOGY FOR DEVELOPING STANDARDS

The National Health Service Standards was formulated through a participatory consultation process under the leadership of the Government of Bangladesh and technical supervision of WHO (Figure 2). The NHSS represent international best practice while also considering the contextual aspects and the current policy environment. It leverages existing analyses and learning, both in relation to developing national health standards and on effective accountability frameworks.

Figure 2: Approach: Consultative and Participatory



The preliminary work included a scoping review of literature including existing policy documents, global best practices, and service standards (with special focus on South-East Asia Region) and facility visits across two districts, Dhaka, and Khulna.

To ensure relevance, multiple consultations were conducted with key stakeholders to ensure necessary perspectives were considered and that the final standards reflect the practice on ground and are practicable, actionable, and implementable. The array of actors includes the DGHS, WHO, technical advisory committee, working committees for the primary tier, extended primary tier, secondary tier, and tertiary tier of public health facilities and members of various professional associations. The timeline and purpose of each consultation is provided in detail in **Error! Reference source not found.**.

Table 2: Proposed timeline and purpose of the consultation workshops

Phase	Purpose
PHASE 1: INCEPTION PHASE	
Appraisal Meeting with TAC	This meeting included participants from DGHS, WHO and the Technical Advisory Committee (TAC) to reflect and provide feedback on the objectives of the assignment and structured framework. Fourteen components of the NHSS were confirmed.

Table 2: Proposed timeline and purpose of the consultation workshops	
Orientation Workshop with Working Committees	This workshop included participants from DGHS, WHO, working committees to elaborate the objectives of the assignment, approach, and outcome. The discussion provided a formative understanding of the existing scenario to facilitate the development of the NHSS. At the end of the workshop, four sub-committees were formed for the four health care tiers that are a focus of the NHSS: Primary; Extended Primary; Secondary and Tertiary.
Health Facility Visit	A team of experts from the working committees, DGHS, WHO and OPM visited public health facilities across the 4 tier of health care of 2 divisions (Dhaka and Khulna) to understand existing health service standards and identify need for development of robust health service standards as per the essential health service package.
PHASE 2: DEVELOPMENT OF STANDARDS	
Review and development workshop	This phase entailed 3 one-day workshops with each committee, with a total of 12 workshops covered in 4 weeks. These workshops were utilised to identify specific resources to be reviewed, enabled discussions to decide, input, and confirm the content of each component of the relevant NHSS. The monitoring framework was also developed.
Residential Workshop	The NHSSs drafted from the review and development workshops were then presented to all working committee numbers at a 3-day residential workshop to provide a more holistic understanding of the NHSS. After which, further inputs were provided to the NHSS.
Discipline Specialist Review	The draft NHSS were shared with discipline specialists (medicine, surgery, gynae, etc./ respective professional association such as Medicine Society, Society of Surgeons, Obstetrical and Gynaecological Society of Bangladesh, Paediatric Association) for their thorough review and feedback. The review of these documents from different perspectives ensured a more robust and comprehensive set of standards within the country context.
PHASE 3: VALIDATION OF STANDARDS	
Validation Workshop with Professional Associations and Facility Managers	This engagement focused on discussions with key stakeholders that were not members of the working committees or TAC, due to capacity limitations but are extensively involved in health care management and/or provision. This consultation provides an opportunity for a more broad-based participatory process. Feedback gathered was incorporated to develop a comprehensive NHSSs.
Meeting with TAC	The comprehensive health service standards were then presented to the TAC for their feedback and endorsement. This was a crucial step in validating and contextualizing the NHSSs.
Consultative Workshop with Stakeholders	A one-day stakeholder discussion with participants who are not members of the working committees or TAC provided an opportunity for a more broad-based participatory process and was another layer of validating the NHSSs. All relevant feedback was incorporated into the NHSS.

2.1 COMPONENTS OF NHSS

The NHSS is designed to provide guidance on a set of fourteen components that were finalised during the inception stage with the technical advisory committee. Table 3 lists the first five components that are specifically related to service delivery, while the remaining nine components are services that help the health institutions deliver services. When combined, all the elements take a holistic approach to the provision of health services.

Table 3: NHSS Health System Components

Service Delivery	1. **Promotive and Preventive Services** Promotive care enhances well-being, focusing on a healthy lifestyle while preventive care anticipates and avoids illnesses, aiming for early detection and intervention to maintain health. 2. **Curative Care Services** Treats existing illnesses or conditions, aiming to restore health and alleviate symptoms through medical interventions and therapies. 3. **Diagnostic Services** The tests and procedures to identify diseases or conditions, aiding accurate medical assessments for treatment planning. 4. **Pharmacy Services** Required physical set up, dispensing protocol, and ensuring safe drug use to promote patient well-being. 5. **Referral** Direct patients/clients seeking medical attention in the appropriate direction, either upward or downward.
Supportive Services	6. **Human Resources for Health** Healthcare workforce to ensure skilled professionals provide quality patient care effectively. 7. **Medicines** The medicine available at each facility based on the health care needs being provided 8. **Equipment** The equipment and tools required for healthcare services and operations. 9. **Other logistics** Including furniture, medical waste, security, and other logistics required for smooth operation of the facility 10. **Digitalization & Information Technology** Integration of digital tools and systems for efficient management, patient care, data analysis, and communication, enhancing overall healthcare delivery. 11. **Physical/Infrastructure Facilities** Facility space, laboratories, providing spaces for healthcare services and operations. 12. **Infection Prevention and Control including Medical Waste Management** involves proper disposal of infectious materials to prevent the spread of diseases and the necessary protocols, sanitation, and hygiene practices to minimize the risk of infections among patients, staff, and visitors. 13. **Management** involves coordinating staff, resources, and services to ensure efficient healthcare delivery. It encompasses strategic planning, financial management, quality assurance, and fostering a supportive environment to meet the community's healthcare needs effectively. 14. **Health and Safety** Protocols to safeguard staff, patients, and visitors. This includes infection control measures, occupational safety practices, and maintaining a secure environment to ensure the well-being of all individuals within the facility.

3 IMPLEMENTATION GUIDE OF NHSS

For proper and full implementation of this NHSS, ownership of both the senior management and implementers are essential prerequisite followed by capacity building of all the stakeholders with proper follow-up. Following are the suggestive steps, which are not exhaustive and may require adjustment and revisions.

1. Print, publish, and distribute the NHSS with proper endorsements from the Advisor and Special Assistant (to the Chief Advisor) for the MOHFW; Secretary, Health Services Division (HSD), MOHFW, and DGHS.
2. Formation and proper functioning of an NHSS Implementation Committee headed by the Additional Director General (Planning and Development), with Directors of Primary Health Care, Hospitals and Clinics, and Planning and Research of the DGHS as members. This committee will prepare an annual plan (with review and revision, if necessary) mid-year for the proper implementation of the NHSS. It will also monitor the execution of the plan and its outputs.
3. Orientation of all officers in the HSD, MOHFW, and DGHS about the NHSS to ensure they are fully aware of the standards at different tiers for various components and can ensure compliance by all concerned. Due to the routine rotation of officers in government, this orientation needs to be repeated every three years.
4. Orientation of all officers of the DGHS working at divisional and district levels about the NHSS, so that, being fully conversant with the standards for various components at different tiers, they ensure proper compliance with the NHSS. This orientation also needs to be repeated every three years.
5. Formation of a Trainers Pool (by drawing officers from divisional, district, and upazila levels) at divisional and district levels and providing them with Training of Trainers on the NHSS. Training of Trainers may need to be repeated if many of the Trainers Pool members change their workplace, and new members are recruited to replace them.
6. Trained Trainers Pool members will conduct orientations for most staff at different facilities after preparing a training plan. Divisional Trainers Pool may be entrusted with the orientation of all medical college hospitals in the respective division. Similarly, the District Trainers Pool will conduct orientation for district/general hospitals, urban health centers, upazila health complexes, union-level facilities, and community clinics in the respective districts.
7. HSD, MOHFW, and DGHS need to ensure the allocation of sufficient funds for conducting the orientation of staff at different tier facilities, including travel/dearness allowances for trainers and trainees (where applicable) and also for Training of Trainers.
8. Information, education, and communication materials (leaflets, posters, booklets, etc.) for the popularization of the NHSS need to be developed, produced in sufficient numbers, and distributed among facilities, so that all staff members are continuously reminded of the standards they need to follow, and a culture of awareness and practice develops over time.

4 BANGLADESH NATIONAL HEALTH SERVICES STANDARDS

Bangladesh National Health Services Standards

Volume 1A: Community Clinic

To ensure effective delivery of essential health services package: Towards Universal Health Coverage through Primary Health Care approach in Bangladesh

VOLUME 1A: NHSS FOR COMMUNITY CLINIC

Community clinic (CC) is the lowest level fixed health facility in the rural areas, established and operationalised by the Government of Bangladesh with active participation of local communities. For most, CC is the first point of contact.

CCs are constructed on lands donated by individual people of community. The construction of health facility, deployment of Human Resources (HR), medicines, equipment, and logistics, are met by the government. Each CC has one community group (CG) and three community support groups (CSGs). Each group comprises of 13 - 17 members with representation of women, adolescent girls and disabled. Currently there are 14,272 community clinics in operation (DGHS, 2024), each providing health services to around 6,000-8,000 rural people.

This section presents the standards for services and supporting services at community clinics.

COMPONENT 1: PROMOTIVE AND PREVENTIVE CARE SERVICES

Promotive and preventive care services include measures taken to prevent diseases and control once developed. These include providing regular information, regular screenings, and counselling on healthy lifestyle, also immunizations, and contraceptives.

Table 4: Promotive and Preventive Services at the Community Clinic	
1. Antenatal Care (ANC)	a. Clinical history b. Identification/ diagnosis of pregnancy c. Obstetrics and foetal assessment[2] d. Information and counselling on nutrition, pregnancy complications, post-partum Family Planning (FP) e. Investigation (strip methods) • Haemoglobin (Hb) estimation • Blood grouping • Blood sugar f. Supply of Iron, Folic Acid (IFA), Zinc and other micronutrients g. Birth Preparedness Plan[3] • Referral hospital • Identification of transportation means. • Setting aside money (by gradual savings – weekly) • Identification of blood donor h. Identify and manage moderate anaemia.
2. Newborn Care After Delivery	a. Counselling on breastfeeding, nutrition, immunization, etc b. Birth registration c. Weighing, temperature management and cord care
3. Postnatal Care (PNC)	a. Clinical history (pain, fever, haemorrhage, convulsion etc.) b. Counselling on postnatal care, breastfeeding, nutrition, immunization, etc. c. Supply of Iron, Folic Acid (IFA), Zinc and other micronutrients d. Post-partum Vitamin A supplementation e. Counselling and provision of FP methods
4. Expanded Programme on Immunization (EPI)	a. Counselling parents on benefits of immunization and adverse effects following immunization (AEFI) b. Follow-up of defaulters (drop-out) c. Immunization site d. Child immunization e. Tetanus Toxoid and Human Papillomavirus (HPV) vaccine for adolescent girls and pregnant women (as applicable)
5. Family Planning	a. Counselling on birth spacing, contraceptive methods and adverse effects. b. Advocacy and awareness building on

[2] Maternal weight; BP measurement; Oedema; Fundal height; Foetal heartbeat.

[3] Birth preparedness plan is for making the delivery safe. This includes identifying a hospital for the institutional delivery/ caesarean section (if needed); identifying transportation particularly for odd hours; delivering in a facility will incur expenses that is why practice of weekly saving during pregnancy will assist in meeting that expense; and caesarean section may require blood therefore identifying potential blood donor(s) (of the same blood group) and making arrangement for those potential donor(s) to accompany the pregnant women to the health facility will ensure blood if required, seamlessly.

Table 4: Promotive and Preventive Services at the Community Clinic	
	• Postpartum (PP) FP • Post-menstrual regulation (MR) FP • Post-abortion care (PAC) FP c. Screening according to medical eligibility criteria (MEC) for contraceptive use • Male condoms • Oral contraceptives • Depot medroxyprogesterone acetate (DMPA) injection continuation
6. Malnutrition Management	a. Growth monitoring and promotion b. Screening for malnutrition (under-nutrition and over-nutrition) c. Counselling parents about breastfeeding and best feeding practice d. Counselling parents on danger signs (about IMCI), nutrition care of a sick child, etc. e. Iron, Folic Acid, Calcium, Zinc and Micronutrient supplementation f. Promotion of infant and young child feeding (IYCF) • Breastfeeding within an hour of birth • Exclusive breastfeeding for 6 months • Breastfeeding until 23 months of age • Appropriate complementary feeding
7. Adolescent Health	a. Counselling on • Puberty • Safe sexual behaviour • Prevention of early marriage • HIV/AIDS • Substance abuse • Family planning • Mental health • Others b. Family Planning service provision c. Adolescent nutrition • Assessment • Supply of Iron, Folic Acid (IFA) and Zinc
8. Non-Communicable Diseases (NCD)	a. Screening and counselling of known cases for risk factors related to: • Family history of cardiovascular diseases (CVD) / diabetes mellitus (DM) /kidney disease • High blood pressure • High total cholesterol • High blood sugar • Smoking • Overweight b. Cancer • Counselling on screening of cervical and breast cancers • Teaching of breast self-examination c. Mental health • Counselling on identification and support to mental health cases, including overcoming stigma and others.

Table 4: Promotive and Preventive Services at the Community Clinic	
9. Communicable Diseases	a. Promote the prevention of communicable diseases such as malaria, dengue, chikungunya, tuberculosis (TB), COVID 19, diarrhoea, hepatitis, scabies, personal hygiene, air-borne diseases, influenza, and others. b. Distribution of long-lasting insecticides nets (LLINs) and counselling on their use alongside other repellents c. Counselling on the prevention of HIV/AIDS d. Counselling on the prevention and identification of Sexually Transmitted Infections (STIs)
10. Water-Borne Diseases	a. Counselling on the storage and consumption of safe drinking water (free from pathogens and other substances such as arsenic) b. Identification and symptomatic treatment of arsenicosis due to drinking of arsenic contaminated water.
11. Food-Borne Diseases	a. Counselling on storage and consumption of fresh food - Avoiding adulterated food, rotten, exposed to flies and dust etc. b. Counselling on avoiding the consumption of junk food and beverages.
12. Social and Behaviour Change Communication (SBCC)	a. Promotion of health, family planning and nutrition including child survival and safe motherhood b. Promotion of essential newborn care practices and identification of danger signs for early care seeking c. Awareness on causes, prevention and control of TB and other communicable diseases d. Promote healthy lifestyle for hypertension and other NCD control. e. Promotion of oral hygiene f. Awareness on child injury and drowning prevention measures g. Health Education related to disability and rehabilitation – promotion of identification of persons with disability and family care taking of the disabled persons. h. To identify, understand and address causes and consequences of gender-based violence (GBV). i. To raise awareness of GBV health services and refer GBV survivors to health facilities.

COMPONENT 2: CURATIVE CARE SERVICES

Curative care services aim at providing treatment for curing illness and/or injury. Community clinics provide limited curative care for minor ailments and identify emergency and complicated cases with referral to higher facilities. In response to the current epidemiological trend of diseases, CC conducts screening of Non-Communicable Diseases (hypertension, diabetes, autism and, club foot etc.) with referral of emergencies and complicated cases to higher level facilities for proper management.

Table 5: Curative Care Services at the Community Clinic

1. Integrated Management of Childhood Illness (IMCI)	a. Management of mild diarrhoea[4] b. Management of mild Acute Respiratory Infection (ARI)[5] c. Identification of danger signs[6] and referral
2. Limited Curative Care	a. Eye care • Treatment of acute conjunctivitis b. Skin care • Treatment of common skin diseases[7]
3. Communicable Disease Management	a. Tuberculosis (TB) • Directly observed treatment, short-course (DOTS) compliance b. Malaria (in endemic areas only) • Rapid Diagnosis and Treatment • First line treatment with uncomplicated case as per National Malaria Elimination programme
4. Fever	a. Manage symptomatically.
5. Emergency care	a. First aid in minor injuries b. Allergic reactions[8] c. Cardiopulmonary Resuscitation (CPR)

[4] Passing of stools few times in a day

[5] Cough, cold, difficulty in breathing

[6] inability to drink or breastfeed, vomits everything, has/had convulsions, lethargic or unconscious.

[7] Scabies, ringworm

[8] Bee sting, food allergy, dust allergy, etc.

COMPONENT 3: DIAGNOSTIC SERVICES

The purpose of diagnostic tests is to aid in the process of diagnosis and to facilitate the administration of suitable treatment. The diagnostic tests at community clinics are kit based, which are listed in Table 6.

Table 6: List of Diagnostic Services available at the Community Clinic	
1.	Urine Pregnancy Test
2.	Urine Strip Test • Protein • Glucose
3.	Rapid diagnostic tests (RDT) • Malaria (in endemic areas) • Dengue - non-structural protein 1 (NS1) • Kala-azar (in endemic areas) – rK39 • Blood glucose test using glucometer.
4.	Blood grouping
5.	Haemoglobin (Hb) estimation

COMPONENT 4: PHARMACY SERVICES

The pharmacy services aim to best use of medicines through proper storage and dispensing.

Table 7: Pharmacy services at the Community Clinic	
1. Requisition	a. Average consumption and time required after submitting a requisition are to be considered before placing a requisition
2. Infrastructure	a. Medicines are stored on shelves enabling. • Protection from the adverse effects of light, dampness, and extreme temperature • Free from vermin and insects • Adequate ventilation b. Access to storage restricted only to authorized personnel. c. Medicine arranged on the racks in alphabetical or pharmacological order considering the expiration date.
3. Stock control and record keeping	a. List of available drugs/medicine are displayed outside the dispensary b. All medicines are available and adequately stocked (ensure availability for at least three months) c. Medicine stock register updated regularly and maintained. That is name, quantity, date of receipt recorded in the stock register at the time of receipt. • Item description • Unit of issue (mg, mL etc) • Receipt of date and issue of stock d. Medicines are dispensed with effective counselling.
4. Effective stock rotation and expiry monitoring	a. Follow the First In, First Out (FIFO) principle in conjunction with expiry dates for inventory management b. The expiry dates should be checked at the time of receipt and noted in the stock record register. c. Stock nearing expiry should not be accepted unless it can be used before expiry. d. Medicine expiry dates should be regularly monitored and expired medicine should be immediately segregated and then disposed as per medical waste management protocol. e. Record of drugs expired during the month to be maintained in the register (including date, medicine name, quantity etc.) f. All items are checked for non-moving as well as those items whose expiry date is within 3 months, a list is prepared, segregation is done item wise and supplier wise. g. The medicine near to expiration should be reported to the higher authority.
5. Demonstration of good pharmacy practices	a. Maintain requisition slips, registers, storage, dispense with counselling b. Verification of the patient/client before medications are handed over c. Reconfirming the medication, timing, and the dosage amount with the prescription

COMPONENT 5: REFERRAL

The purpose of a structured referral system is to introduce an efficient upward and downward referral system to maximise the utilisation of CC and minimise the patient load in higher facilities. A healthcare referral system involving health facilities at various levels is recommended in Figure 3 to ensure that patients in need have access to high-quality medical resources.

The upward referral of patients, denoted by a green arrow, is from Community Clinics (CCs) to Union Sub Center (USC) and the Upazila Health Complex (UzHC). The downward referral of patients occurs when community clinics receive patients from USCs and UzHCs, as denoted by an orange arrow.

Figure 3: Referral pathway at Community Clinics

Effective referral requires clear communication with the referred facility to ensure optimal patient care. The health provider is responsible for updating the referral register and filling out the patient referral form with all necessary information. All referral patients are to be provided with appropriate care. Equal importance to be given to downward referrals.

A referral receiving and tracking system at the facilities will ensure that referred patients/clients receive priority treatment and necessary support upon their arrival at the healthcare facility. Digital technology to be used to make it efficient for patients as well as service providers. The reasons for referral from a Community Clinic are listed in .

In case of suspected outbreaks (as per the guidelines), the UzHC needs to be notified.

Table 8: Patients to be referred from the Community Clinic.	
1. **Antenatal Care**	• Ultrasonogram (for 1st and 4th ANC visit) • Any complications in previous pregnancy • Pre/eclampsia • Ante-partum Haemorrhage • Abdominal pain in pregnancy • Premature rupture of membranes • High blood pressure • Diabetes • Sexually Transmitted Infections (STI) • HIV/AIDS (counselling and testing) • Absence of foetal heartbeat • Pregnancy complications such as malaria and urinary tract infections (UTI)
2. **Postnatal Care**	Postnatal complications • Excessive bleeding • Anaemia • Puerperal psychosis • Postpartum infection Obstetric complications • Haemorrhage • Puerperal infection/sepsis • Obstetrics Fistula Genitals prolapse
3. **Child health**	• Any congenital anomalies • Neonatal jaundice • Moderate/Severe Pneumonia • Moderate/Severe Diarrhoea • IMCI having danger signs ✓ inability to drink or breastfeed. ✓ vomits everything. ✓ has/had convulsions. ✓ lethargic or unconscious
4. **Nutrition**	• Severe Acute Malnutrition, (complicated and uncomplicated)
5. **NCD**	• Suspected High Blood Pressure[9] • Suspected Diabetes Type II[10] • Arsenicosis • Suspected Cancer • Chronic Obstructive Pulmonary Disorder (COPD) • Suspected Drug addiction

[9] Referral to the UzHC for confirmation of diagnosis, initiation of the treatment; refill of the medicine will be continued from CC.

[10] Referral to the UzHC for confirmation of diagnosis, initiation of the treatment; refill of the medicine will be continued from CC.

Table 8: Patients to be referred from the Community Clinic.	
6. **Eye care**	• Visual impairment • Cataract • Eye injury[11]
7. **ENT**	• Ear problem[12] • Tonsilitis
8. **Other**	• Poisoning • Animal bite (snake bite, dog bite, cat bite, fox bite) • Suspected TB, malaria, leprosy, filariasis, kala azar, dengue, chikungunya, acute water diarrhoea, and others • Adverse effect following immunization (AEFI) • Burns after initial management. • Drowning • Lightning
Patients should be referred from the Community Clinic to the Union Sub-Center and/or Upazila Health Complex • For any of the conditions listed above • If the treatment provided at the CC does not improve the patient's condition • For any other condition not mentioned in the list above for which the diagnosis requires further investigation and advanced management	

[11] such as cornea injury

[12] Such as foreign body, wax impaction, infection, injury

COMPONENT 6: HUMAN RESOURCES FOR HEALTH

The Community Health Care Providers (CHCPs) (male or female) are currently the key service providers and full-time staff at the community clinics. A Health Assistant (male or female) and a Family Welfare Assistant (female) work in a CC for fixed days a week. In addition to the existing staff, an accredited health worker and a support staff position has been proposed (Table 9).

Table 9: Human Resources for Health at the Community Clinic

	Existing	Proposed	Total
1. Accredited Health Worker – full time		1	1
2. Community Health Care Provider (CHCP) – full time	1		1
3. Health Assistant (HA) – part-time[13]	1		1
4. Family Welfare Assistant (FWA) – part-time	1		1
5. Support staff – full time		1	1
Total	**3**	**2**	**5**

[13] Included in the organogram of Upazila Health Complex

COMPONENT 7: MEDICINE

The list of medicine is from ESP (2016) taking into consideration that antibiotics have been omitted as per the GoB's decision and NCD medicine has been included.

Table 10: List of medicine at the Community Clinic	
Analgesics, Antipyretics, Non-steroidal Anti-Inflammatory	**Medicines acting on the respiratory tract**
Paracetamol	Salbutamol s acting on the respiratory tract
Hyoscine Butyl bromide	**Solutions correcting water and electrolyte disturbances**
Antiallergics and Medicines in Anaphylaxis	Oral Rehydration Salts (ORS)
Chlorpheniramine Maleate	**Vitamins** and Minerals
Anti-infective Medicines	Ascorbic Acid/Vitamin C
Albendazole	Vitamin A
Chloramphenicol Eye Drop	Vitamin B-Complex
Cardiovascular Medicines	Vitamin K
Amlodipine	Calcium
Dermatological Medicines (topical)	Ferrous Sulphate/Fumarate, with or without Folic Acid
Gentian Violet	Folic Acid
Neomycin sulphate with Bacitracin	Zinc
Salicylic Acid + Benzoic Acid	**Disinfectants and Antiseptics**
Benzyl Benzoate	Chlorhexidine with or without Cetrimide
Gastrointestinal medicines	Chlorhexidine 7.1% for cord application
Aluminium Hydroxide Gel with or without	**Contraceptives**
Magnesium Trisilicate	Male Condoms
Antacid	Oral Contraceptive Pills
Hormones, other Endocrine medicines, and contraceptives	Continuation of Depot Medroxyprogesterone (DMPA)
Metformin Hydrochloride	

COMPONENT 8: EQUIPMENT

List of equipment to be available at the Community Clinic is given in Table 11.

Table 11: List of medical equipment at the Community Clinic	
Stethoscope	Tissue forceps
Blood Pressure Measuring Instrument	Needle holder
Thermometer	Curved cutting needle
Vision testing chart	Silk yarn
Timer	General scissors
Torch	Tongue depressor
Scissors	Hand/foot splint wooden
Medium Sized Artery Forceps	Kidney tray
Dressing set	Heavy duty gloves
Weighing machine	Hb estimation kit
Hanging scale	Blood Grouping kit
Height measuring board	Leucoplast/ Micropore
Measuring Tape for MUAC	
Umbo bag	
Glucometer with strips	

COMPONENT 9: OTHER LOGISTICS

List of logistics at the Community Clinics is given in Table 12.

Table 12: List of other logistics at the community clinic

Furniture and fixtures	**Infection prevention**
Patient Examination Table	Soap
Stool	Sanitizer
Almirah	Running Water
Back-rest bench for 4-5 persons	Disinfectant
Table with drawers	Detergent
Chairs	Hand gloves
Dispensing table	Buckets, bowls, mugs, brushes, brooms, dusters & others
Multiple registers	Toilet cleaner
Growth Monitoring Chart	Aluminium saucepan – 2 litres
Facility Infrastructure	Face masks
Tube well	**Consumables**
Electric fans and lights	Syringes and needles
Sanitation sewage system	Gauze
Medical Waste Management	Bandage
Colour coded waste bins	Latex gloves or Hand gloves
Waste bags	Strips for RDT
Spade and other digging tools[14]	Cotton Wool
Heavy duty gloves	**Safety**
PPE Equipment	Fire extinguisher
	CCTV cameras

[14] For waste pit

COMPONENT 10: DIGITALIZATION & INFORMATION TECHNOLOGY

Community clinics to be fully digitalized in its operation, correspondence with higher authorities and report transmission. As an integral part of the digitization process, all patients/clients seeking health service to be assigned a permanent patient ID number (PID). These PIDs will be derived from the patient/client's birth registration number[15] or the National identification number (NID)[16], contingent upon their age. The PIDs will be utilised to monitor previous records upon the patient/client's visit to the CC, allowing service providers to examine the patient's medical history. Additionally, these PIDs to be at all other government health facilities. The electronic transmission of patient/client data to the current DGHS platform to occur on a regular basis. Digitalization will also be incorporated into the referral process of patients between public health facilities and the electronic drug management information system.

To operationalise the digitisation the following logistics and equipment will be required:

1 Laptop / desktop computer
2 Printer
3 Internet – modem and SIM card
4 Web-based app for patient registration and Electronic Medical Record.

[15] for under 18 years
[16] for 18 years and above

COMPONENT 11: PHYSICAL/INFRASTRUCTURE FACILITIES

The community clinic construction started soon after 1998, with a donation of land from community individual of 5 decimal area upon which a one-story building of 536 sq. ft was constructed. After 2012, the required land area was increased to 8 decimal area and the layout was redesigned for a one-story building of 765 sq. ft.

As the standards are proposing an additional service provider, that is an accredited health worker, additional space is required. Therefore, the standard suggests a redesign of the CC to integrate the following requirements in Table 13.

Table 13: Physical Infrastructure standards at the Community Clinic

1. Display and signage	a. Facility signboards and opening hours displayed at the facility entrance(s) in Bangla b. Adequate and clear signage to be displayed on the main and connecting roads to the facility. c. Citizen charter is displayed at the CC entrance in Bangla. d. List of available medicine is displayed and updated daily e. Safety, hazard, and caution signs prominently displayed at relevant places. f. Important information such as contact numbers (e.g., fire, police, ambulance, and referral centers) clearly displayed g. The services to be provided, cleaning schedule, monthly performance chart and relevant behaviour change communication (BCC) messages should be clearly displayed in the rooms
2. Maintenance	a. Facility premises to be well maintained and free from • Garbage • Commercial banners, posters, and paintings • Non-functioning equipment • Unauthorised establishments b. The facility building is neat and clean. Staff follow written policies and procedures and schedules for: • Disinfection and cleaning of all equipment, furniture, floors, walls, storage areas and other surfaces and areas
3. Usability	a. The CC to be user friendly for all, including the disable. • Use of ramps where needed to ensure elderly and disabled friendly access (such as the use of wheelchairs) b. The CC is well lit and ventilated c. There are always clear pathways to and from exits. d. Floor surfaces are anti-skid and non-slippery.
4. Rooms	a. The CCs to be constructed on an elevated land to protect the facility from flooding and water logging. a. The CC to be located with good road availability to ensure easy access b. Waiting area for clients/patients and attendants • There are designated separate male and female waiting areas c. Three consultation rooms: • One room for the accredited health worker • One room for the CHCP • One room to be shared between the HA and FWA

Table 13: Physical Infrastructure standards at the Community Clinic	
	d. Store and medicine room e. Two waiting lobbies, segregated for male and female with adequate seating arrangement, benches with backrest. f. Two segregated toilets for male and female, with running water supply g. Two handwashing facilities with availability of running water, liquid soap and/or sanitizer. One for the service providers fitted inside a consultation room and the other for the service recipient fitted inside the waiting lobby. h. Use of ramps where needed to ensure elderly and disabled friendly access (such as the use of wheelchairs)
5. **Utilities**	a. Electricity: supply connection with back-up power through generator/solar b. Water: Provision of safe drinking water c. Sanitation: drainage system should be cleaned and maintained d. Fire Safety: fire extinguishers and fire hoses are visible and accessible in strategic areas.

COMPONENT 12: INFECTION PREVENTION & CONTROL INCLUDING MEDICAL WASTE MANAGEMENT

Infection prevention and medical waste management (MWM) is paramount in health care facilities/clinics as it protects both patients and healthcare workers from diseases. Without controlling the spread of infection, clinics would become unsafe to go to or visit and operate.

Table 14: Infection prevention and MWM measures at the Community Clinic	
Infection Prevention	
1. Cleanliness	a. The facility, equipment and supplies are kept clean and safe for clients/patients, visitors/attendants, and staff. b. Facility premises are free from litter and other refuse. c. Equipment, floors, and walls are free from body fluids, dust, spit, and grit. • Disinfectant and detergent should be used for cleaning the floor and wall as applicable. • Cleanliness shall always be maintained by washing and mopping with disinfectants. • Toilets should be cleaned using disinfectant and detergent as applicable.
2. Hygiene	a. Availability of running water supply, soap, alcohol-based hand disinfectant b. Regular handwashing with soap and/or use of sanitizers
3. Guidelines	a. Guidelines for standard hand washing and infection prevention procedures should be displayed
4. Protective Equipment	a. Availability of face mask, hand gloves b. Regular use of face mask and hand gloves by the service providers
5. Disposal	a. Safe final disposal of medical waste in accordance with the Medical Waste (Management and Processes) Rules 2008 b. Use of auto disposable syringes and needles and disposing them appropriately with medical waste
Medical Waste Management	
1. Guidelines	**a.** The Community Clinic should have a documented waste disposal strategy specifying protocols, responsibilities, a schedule for waste collection, and a list of necessary equipment (e.g., waste bins and bags). b. A clear guide for waste segregation and storage to be visibly posted in area(s) where medical waste is generated. • This should include waste segregation in clearly labelled coded bins in accordance with the Medical Waste (Management and Processes) Rules 2008. • IEC materials promoting awareness campaign on medical waste management to be displayed at the facilities for both service providers and recipients
2. Capacity building	a. Periodic capacity building needed for staff handling infectious waste on hazards of waste, management of waste and infection control.
3. Maintenance and logistics	a. All waste must be protected from theft, vandalism or scavenging by persons or animals. b. Waste to be segregated at its origin. c. Different color-coded bins to be available in sufficient numbers.

Table 14: Infection prevention and MWM measures at the Community Clinic	
Infection Prevention	
	d. Medical waste should be correctly and appropriately disposed of as per the protocol (details in Table 15)

Table 15: Medical waste management protocol at the Community Clinic		
Segregation of wastes at source of origin into:	**Coloured bins:**	**Disposing off method**
1. Non-hazardous/infectious, general waste	Black	Burn and/or Burry (in a separate pit[17] than the infectious, hazardous one)
2. Non-hazardous with recycled items	Green	Recycle
3. Hazardous, Infectious waste	Yellow	Burn and/or bury (in a pre-prepared pit[18])
4. Hazardous, Infectious liquid waste	Blue	Add disinfectant and keep it for 30 minutes and then throw it down the drain.

[17] Floor of the waste pit should not be covered with concrete or any other means.
[18] Floor of the waste pit should not be covered with concrete or any other means.

COMPONENT 13: MANAGEMENT

The Community Clinics were originally introduced under the Directorate General of Health Service. The Government of Bangladesh In 2018, enacted the Community Clinic Support Trust Act 2018. A full-fledged 15-member board of trustees was formed to manage the operation of the community clinics. The Act allows the Trust to raise funds to supplement the financial support provided by the government.

The community clinic is a unique example of Public-Private Partnership (PPP) as all the CCs have been constructed on community donated land and all other support is provided by the government including the construction, medicine, service providers, logistics. The management of the CC is undertaken both by the community and GoB through the Community Group (CG) and supported further by three Community Support Groups (CSG). The community plays an active role for its improvement.

The CGis comprised of members from the community to support the activities of the community clinics. The group can vary between 13-17 members with at least one-third being female members. An elected-Union Parishad (UP)[19] member acts as the chairperson who is supported by two vice chairpersons. There is a provision that out of president and vice presidents at least one must be female. Land donors/his or her representative are life members and act as senior vice president of the CG. The CHCP works as the member secretary without a voting right.

The CSG is a group of community representatives from all strata of society including women, men, adolescents, young women, poor and disabled who will voluntarily work together with the CG to ensure the CC function properly and health services are delivered. The CSGs help CG to make the community aware regarding the services available at CC and provide common health messages. For each CC, there should be 3 CSGs with 13- 17 members, having at least one-third female members (DGHS, 2019).

Table 16: Management of Community Clinic
1. Community Clinics are under the Community Clinic Health Support Trust
2. Financial support is received from the Government of Bangladesh (currently from development budget)
3. CHCP and HA are supervised by the Assistant Health Inspector
4. FWA is supervised by the Family Planning Inspector
5. Each CC has one Community Group and three Community Support Groups
6. Maintenance of Client/Patient and other Registers as mandated by the DGHS
7. Grievance Redress Mechanism in place[20]
8. Signage informing the operating hours and days, and availability of staff, particularly HA and FWA to be displayed.
9. Availability of latest approved job description of the staff
10. Community Clinics will operate from 8:00 AM – 2:30 PM

[19] Local government body

[20] A Grievance redressal system allows individuals (in this case - patients, clients, attendants, visitors of a health facility) to voice their complaints and concerns (could be regarding the services and/or service provider/other staff) to the respective authorities who in turn respond by redressing, where possible, otherwise informing the situation. For service delivery facilities this is an indication of governance demonstrating accountability to the citizens. There are many grievance redressal systems in place, such as the 16263-call centre number at DGHS or the establishment of a complaint box that is periodically opened after which the complaint receipt and response from the authority are publicly displayed.

COMPONENT 14: HEALTH & SAFETY

This component is designated to protect the health and safety of clients/patients, staffs and visitors and allow the service delivery to be safe, accessible and respect clients'/patients' need for privacy.

Table 17: Health and Safety requirements at a Community Clinic	
1. **Policies**	a. Health and safety policies, procedures and standard protocols are available, displayed and followed by staff to: • Prevent contamination incidents related to health care waste. • Follow a sharps and needle-stick injuries (NSI) reporting system, with proper segregation and disposal of sharps. • Provide basic life support
2. **Vaccination**	a. Ensure appropriate vaccination for the staff of the CC
3. **Fire Safety**	a. Availability of firefighting equipment (fire extinguisher, and fire blanket) b. Trained staff who conduct periodic mock drills.
4. **Storage**	a. Chemicals, medicine, and equipment are stored safely, as per protocols
5. **Protective Equipment**	a. Staff are provided with and use protective equipment, e.g., gloves, aprons, masks for safe handling of hazardous material.
6. **Surveillance camera (CCTV) systems**	a. Surveillance camera (CCTV) systems installed both inside and outside the facility to ensure: • the safety and security of service providers, and patients, and • prevent the theft of medicine and equipment. b. Recording should be preserved for a minimum of one year.

Bangladesh National Health Services Standards

Volume 1B: Union Sub-Center (USC)/ Rural Dispensary (RD)/ Union Health and Family Welfare Center (UH&FWC)

To ensure effective delivery of essential health service package: Towards Universal Health Coverage through Primary Health Care approach in Bangladesh

VOLUME 1B: NHSS FOR UNION SUB-CENTRE (USC)/ RURAL DISPENSARY (RD)/ UNION HEALTH AND FAMILY WELFARE CENTER (UH&FWC)

Union Sub-Centres (USCs), Rural Dispensaries (RDs), and Union Health and Family Welfare Centers (UH&FWCs) serve as union-level healthcare facilities under the Directorate General of Health Services (DGHS). A union is the smallest administrative unit in Bangladesh, with a total of 4,596 unions. However, there are only 1,312 USCs/RDs and 87 UH&FWCs (DGHS, 2024). These facilities primarily offer outpatient services and often serve as the first point of contact for many people living in rural areas.

COMPONENT 1: PROMOTIVE AND PREVENTIVE SERVICES

Promotive and preventive care services include measures taken to prevent diseases and control once developed. These include providing regular information, regular screenings, and counselling on healthy lifestyle, also immunizations, and contraceptives.

Table 18: Promotive and Preventive Services at the USC/RD/UH&FWC	
1. **Antenatal Care (ANC)**	a. Clinical history b. Identification/ diagnosis of pregnancy c. Obstetrics and foetal assessment[21] d. Information and counselling on nutrition, pregnancy complications, post-partum Family Planning (FP) e. Investigation (strip methods) • Haemoglobin (Hb) estimation • Blood grouping and Rh typing • Pregnancy test • Blood sugar • Ultrasonogram f. Supply of Iron, Folic Acid (IFA), Zinc and other micronutrients g. Birth Preparedness Plan[22] • Referral hospital • Identification of transportation means • Setting aside money (by gradual savings – weekly) • Identification of blood donor h. Identify and manage moderate anaemia.
2. **Newborn care**	a. Promotion of essential newborn care practice and newborn danger signs for early care seeking b. Counselling about breastfeeding, nutrition, immunization, etc. c. Breastfeeding within one hour after delivery d. Prevention of newborn conjunctivitis
3. **Postnatal Care (PNC)**	a. Clinical history (pain, fever, haemorrhage, convulsion etc.) b. Counselling on postnatal care, breastfeeding, nutrition, immunization, etc. c. Counselling on post-partum eclampsia d. Counselling of postnatal complications • Anaemia • Post partum psychosis e. Supply of Iron, Folic Acid (IFA), Zinc and other micronutrients f. Post-partum Vitamin A supplementation g. Counselling and Provision of Family Planning methods

[21] Maternal weight; BP measurement; Oedema; Fundal height; Foetal heartbeat.

[22] Birth preparedness plan is for making the delivery safe. This includes identifying a hospital for the institutional delivery/ caesarean section (if needed); identifying transportation particularly for odd hours; delivering in a facility will incur expenses that is why practice of weekly saving during pregnancy will assist in meeting that expense; and caesarean section may require blood therefore identifying potential blood donor(s) (of the same blood group) and making arrangement for those potential donor(s) to accompany the pregnant women to the health facility will ensure blood if required, seamlessly.

Table 18: Promotive and Preventive Services at the USC/RD/UH&FWC	
4. Expanded Programme on Immunization (EPI)	a. Counselling parents on immunization and adverse effects following immunization (AEFI) b. Follow-up of defaulters (drop-out) c. Child immunization d. Tetanus Toxoid and Human Papillomavirus (HPV) vaccine for adolescent girls, pregnant women (as applicable) e. Surveillance of vaccine-preventable diseases
5. Family Planning (FP)	a. Family Planning (FP) counselling • Newly married couple • Birth Spacing, methods and adverse effects. b. Advocacy and awareness development on • Postpartum (PP) FP • Post-menstrual regulation (MR) FP • Post-abortion care (PAC) FP c. Screening according to Medical Eligibility Criteria (MEC) for contraceptive use • Male Condoms • Oral contraceptives • Initiation of Depot medroxyprogesterone acetate (DMPA) injection • DMPA injection continuation. • Intrauterine devices • Postpartum Intrauterine Device (IUD) Insertion • Providing Post-partum (PP) FP • Providing post-menstrual regulation (MR) FP • Providing post-abortion care (PAC) FP d. Management of contraceptive use complications
6. Malnutrition management	a. Growth Monitoring and Promotion b. Screening for malnutrition (under nutrition and over-nutrition) c. Counselling parents about breastfeeding and best feeding practice d. Iron, Folic Acid, Calcium, Zinc and Micronutrient supplementation e. Promotion of Infant and Young Child Feeding (IYCF) • Breastfeeding within an hour of birth • Exclusive breastfeeding for 6 months • Breastfeeding until 23 months of age • Appropriate complementary feeding
7. Integrated Management of Childhood Illness (IMCI)	a. Counselling parents on danger signs, nutrition of the sick child, etc. b. Identification of danger signs and referral[23]
8. Adolescent Health	a. Counselling on • Puberty • Safe sexual behaviour • Prevention of early marriage • HIV/AIDS

[23] inability to drink or breastfeed; vomits everything; convulsions; lethargic or unconscious.

Table 18: Promotive and Preventive Services at the USC/RD/UH&FWC	
	• Substance abuse • Family planning • Mental health • Others b. Family Planning service provision c. Adolescent nutrition • Assessment • Supply of Iron, Folic Acid (IFA) and Zinc d. Screening for Sexually Transmitted Infections (STI) e. Adolescent Sexual and Reproductive Health f. Counselling on risk taking behaviour.
9. Non-Communicable Diseases (NCD)	a. Screening and counselling of known cases for Risk Factors of potential diseases • Family History of cardiovascular diseases (CVD) / diabetes mellitus (DM) /kidney disease • High Blood Pressure • High Total Cholesterol • High Blood Sugar • Smoking • Overweight b. Cancer • Counselling on screening of cervical, breast and prostate cancers • Teaching of breast self-examination • Clinical Breast Examination c. Mental health • Counselling on identification and support to mental health cases, including limiting stigma and others.
10. Communicable Diseases	a. Promote the prevention of communicable diseases such as malaria, dengue, chikungunya, tuberculosis (TB), COVID 19, diarrhoea, hepatitis, scabies, personal hygiene, air-borne diseases, influenza, and others b. Distribution of long-lasting insecticides nets (LLINs) and counselling on their use alongside other repellents c. Counselling on the prevention of HIV/AIDS d. Counselling on the prevention and identification of Sexually Transmitted Infections (STIs)
11. Water-Borne Diseases	a. Counselling on the storage and consumption of safe drinking water (free from pathogens and other substances such as arsenic) b. Identification and symptomatic treatment of arsenicosis due to drinking of arsenic contaminated water.
12. Food-Borne Diseases	a. Counselling on storage and consumption of fresh food - Avoiding adulterated food, rotten, exposed to flies and dust etc. b. Counselling on avoiding the consumption of junk food and beverages.
13. Social and Behaviour Change	a. Promotion of health, family planning, and nutrition, including child survival and safe motherhood b. Promotion of essential newborn care practice and identification of danger signs for early care seeking

Table 18: Promotive and Preventive Services at the USC/RD/UH&FWC	
Communication (SBCC)	c. Awareness on causes, prevention and control of TB and other communicable diseases d. Promote healthy lifestyle for hypertension and other NCD control. e. Promotion of oral hygiene f. Awareness on child injury and drowning prevention measures g. Health Education related to disability and rehabilitation – promotion of identification of persons with disability and family care taking of the disabled persons. h. To identify, understand and address causes and consequences of gender-based violence (GBV). i. To raise awareness of GBV health services and refer GBV survivors to health facilities.

COMPONENT 2: CURATIVE CARE SERVICES

Curative care services aim at providing treatment for curing illness and/or injury with referral of emergencies and complicated cases to higher level facilities for proper management.

Table 19: Curative care services at the USC/RD/UH&FWC	
1. **Integrated Management of Childhood Illness (IMCI)**	a. Management of moderate Diarrhoea[24] b. Management of Moderate Acute Respiratory Infection (ARI)[25] c. Identification of danger signs[26] and referral
2. **Limited Curative Care**	a. Eye care • Treatment of conjunctivitis b. Skin care • Treatment of common skin diseases[27]
3. **Management of Ear, Nose and Throat (ENT) problems**	a. Ear care • Removal of wax and foreign body • Ear infection (Acute and chronic) • Mastoiditis • Management of acute suppurative otitis media b. Throat care • Tonsilitis • Pharyngitis
4. **Management of fever and febrile diseases**	
5. **Communicable Disease Management**	a. Tuberculosis (TB) • Directly observed treatment, short-course (DOTS) compliance as per treatment protocol b. Malaria (in endemic areas only) • Rapid Diagnosis and Treatment • First line treatment with uncomplicated case as per National Malaria Elimination programme c. Dengue, Chikungunya • Outpatient Management d. Neglected Tropical Diseases (NTDs) (Kala-azar, Lymphatic Filariasis (LF), leprosy, etc.) • Identification and Outpatient Management
6. **Non-Communicable Disease Management**	a. Type-II Diabetes b. Hypertension c. Respiratory illness • Asthma (acute)
7. **Obstetric Care Management**	a. Personal and obstetric history b. Examination • Foetal position

[24] Presence of at least three of the following signs: (1) Restless, irritable; (2) Sunken eyes; (3) Drinks eagerly, thirsty and (4) Skin pinch goes back slowly.
[25] Cough, cold, mild pneumonia
[26] inability to drink or breastfeed, vomits everything, has/had convulsions, lethargic or unconscious.
[27] Scabies; Ringworm; Impetigo; Dermatitis; Eczema

Table 19: Curative care services at the USC/RD/UH&FWC	
	• Foetal heartbeat c. Monitor labour progression: Partograph. d. Labour induction e. Normal Vaginal Deliveries f. Controlled cord traction g. Episiotomy (if indicated) h. Mild and moderate anaemia
8. Newborn Care Management	a. Pre-term Newborn Care b. Immediate Newborn Care • Clean cord cutting and tying. • Single application of Chlorhexidine 7.1% to the cord • Prevention and management of hypothermia ✓ Drying and wrapping ✓ Skin-to-skin contact ✓ Delayed bathing (after 72 hours) • Identification and management of breathing problems (digital stimulation, bag & mask resuscitation) c. Newborn Care after delivery • Weighing, temperature management and cord care • Identification and management of sepsis • Identification and management of omphalitis • Identification of congenital anomalies
9. Adolescent Health	a. Syndromic management of Sexually Transmitted Infections (STIs) b. Supply of Iron, Folic Acid (IFA) and other micronutrients
10. Undernutrition Management	a. Management of Moderate Acute Malnutrition b. Management of Severe Acute Malnutrition (SAM), Uncomplicated
11. Sexual and Gender Based Violence	a. Case identification b. First-point counselling c. Emergency contraception d. Treatment of minor injuries e. Prophylaxis for STI f. Psychological support g. Medic-legal examination
12. Emergency Care Management	a. First aid in minor injuries b. Allergic reactions[28] c. Cardiopulmonary Resuscitation (CPR) d. Identification of animal bite (snake bite, dog bite, cat bite, fox bite)

[28] Bee sting, food allergy, dust allergy, rhinitis, sinusitis

COMPONENT 3: DIAGNOSTIC SERVICES

Diagnostic tests are to support the service provider in providing appropriate treatment. A list of diagnostic services to be available at a USC/RD/UH&FWC are listed in Table 20.

Table 20: List of Diagnostic Services available at the USC/RD/UH&FWC

Laboratory	Imaging and Others
Urine Pregnancy Test	Ultrasonography
Urine test strip – Protein and Glucose • Protein • Glucose	Electrocardiogram (ECG)
Rapid Diagnostic Tests (RDT) • Malaria (in endemic areas) • Dengue non-structural protein 1 (NS1) • Blood glucose test using glucometer	
Blood grouping	
Haemoglobin estimation	
Complete Blood Count (CBC)	
Serum creatinine	
Serum Cholesterol	

COMPONENT 4: PHARMACY SERVICES

The pharmacy services aim to prevent drug misuse, and safely store the drug in the USC/RD/UH&FWC.

Table 21: Pharmacy services at the USC/RD/UH&FWC

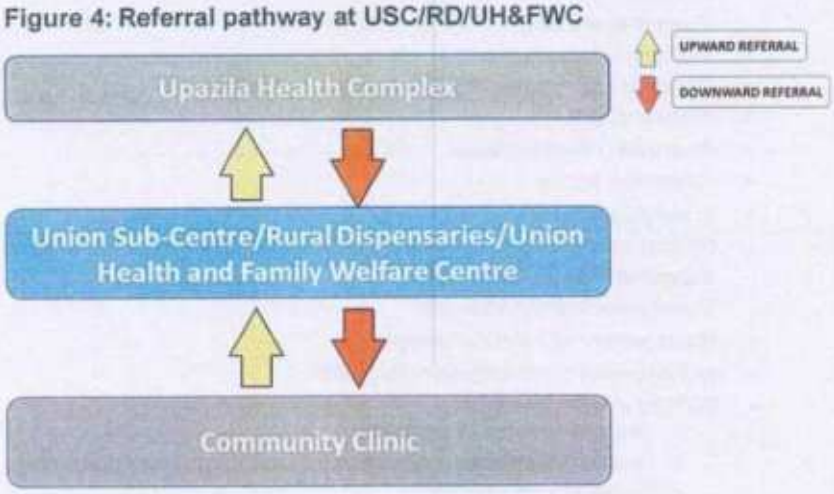
1. Requisition	a. Average consumption and time required after submitting a requisition are to be considered before placing a requisition
2. Infrastructure	a. Medicines are stored on shelves enabling. • Protection from the adverse effects of light, dampness, and extreme temperature • Free from vermin and insects • Adequate ventilation b. Access to storage restricted only to authorized personnel. c. Medicine arranged on the racks in alphabetical or pharmacological order considering the expiration date.
3. Stock Control and Record Keeping	a. List of available drugs/medicine are displayed outside the dispensary b. All medicines are available and adequately stocked (ensure availability for at least three months) c. Medicine stock register updated regularly and maintained. That is name, quantity, date of receipt recorded in the stock register at the time of receipt. • Item description • Unit of issue (mg, mL etc.) • Receipt of date and issue of stock d. Medicines are dispensed with effective counselling.
4. Effective Stock Rotation and Expiry Monitoring	a. Follow the First In, First Out (FIFO) principle in conjunction with expiry dates for inventory management b. The expiry dates should be checked at the time of receipt and noted in the stock record register. c. Stock nearing expiry should not be accepted unless it can be used before expiry. d. Medicine expiry dates should be regularly monitored and expired medicine should be immediately segregated and then disposed as per medical waste management protocol. e. Record of drugs expired during the month to be maintained in the register (including date, medicine name, quantity etc.) f. All items are checked for non-moving as well as those items whose expiry date is within 3 months, a list is prepared, segregation is done item wise and supplier wise. g. The medicine near to expiration should be reported to the higher authority.
5. Demonstration of Good Pharmacy Practices	a. Maintain requisition slips, registers, storage, dispense with counselling b. Verification of the patient/client before medications are handed over c. Reconfirming the medication, timing, and the dosage amount with the prescription

COMPONENT 5: REFERRAL

The purpose of a structured referral system is to introduce an efficient upward and downward referral system to maximise the utilisation of USC/RD/UH&FWC and minimise the patient load on higher facilities. A healthcare referral system involving health facilities at various levels is recommended in **Figure 4** to ensure that patients in need have access to high-quality medical resources.

The upward referral for patients, denoted by the arrows in green, is composed of two pathways, (1) from Community Clinics to USC/RD/UH&FWC and (2) from USC/RD/UH&FWC to Upazila Health Complex. The downward referral for patients, denoted by the arrows in orange, is divided into two pathways (1) from the Upazila Health Complexes to USC/RD/UH&FWC and (2) from the USC/RD/UH&FWC to the Community Clinics.

Figure 4: Referral pathway at USC/RD/UH&FWC



Effective referral requires clear communication with the referred facility to ensure optimal patient care. The health provider is responsible for updating the referral register and filling out the patient referral form with all necessary information. All referral patients are to be provided with appropriate care. Equal importance should be given to downward referrals.

A referral receiving and tracking system at the facilities will ensure that referred patients/clients receive priority treatment and necessary support upon their arrival at the healthcare facility. Digital technology is to be used to make it efficient for patients as well as service providers. Table 22 provides an indicative list of reasons for referral from a USC/RD/UH&FWC. In case of suspected outbreaks (as per the guidelines), the UzHC needs to be notified.

Table 22: Reasons for patient referral from the USC/RD/UH&FWC

1. **Antenatal Care (ANC)**	• Pregnancy complications ✓ Hypertension ✓ Diabetes • Identify and manage pregnancy complications and associated severe infections • Anaemia • Pregnancy complications such as malaria and severe UTI

Table 22: Reasons for patient referral from the USC/RD/UH&FWC	
	• Sexually Transmitted Infections (STI) • Identify, stabilize, and refer Pre/eclampsia. • Ante-partum haemorrhage • Abdominal pain in pregnancy • Premature rupture of membranes • Obstructed labour • Prolapsed cord/hand • Manual removal of placenta
2. Postnatal Care (PNC)	Postnatal complications • Excessive bleeding • Anaemia • Puerperal sepsis • Postpartum psychosis Identification and management of obstetric complications • Haemorrhage • Puerperal infection/sepsis • Obstetrics fistula • Genitals prolapse.
3. Child health	• Special care of pre-term or Low Birth Weight (LBW) neonate, including Kangaroo Mother Care • Management of LBW babies • Management of neonatal jaundice • Management of breastfeeding problems • IMCI having danger signs ✓ inability to drink or breastfeed. ✓ vomits everything. ✓ has/had convulsions. ✓ lethargic or unconscious
4. Nutrition	Severe Acute Malnutrition, complicated
5. NCD	Mental health conditions Management of Hypertension
6. CD	Identify suspected HIV/AIDS cases.
7. Other	• Poisoning • Animal bite (snake bite, dog bite, cat bite fox bite) • Suspected TB, malaria, leprosy, filariasis, kala azar, dengue, chikungunya, acute water diarrhoea, and others • Adverse effect following immunization (AEFI) • Burns after initial management. • Drowning • Lightning
Patients should be referred from the USC/RD/UH&FWC to the Upazila Health Complex • For any of the conditions listed above • If the treatment provided at the USC/RD/UH&FWC does not improve the patient's condition • For any other condition not mentioned in the list above for which the diagnosis requires further investigation and advanced management	

COMPONENT 6: HUMAN RESOURCES FOR HEALTH

In addition to the existing staff at the **USC/RD/UH&FWC**, a medical technologist position has been proposed in the NHSS.

Table 23: Human Resources for Health at the USC/RD/UH&FWC

Staff category	Existing	Proposed	Total
Medical Officer	1		1
Sub-Assistant Community Medical Officer (SACMO)	1		1
Midwife	1		1
Pharmacist	1		1
Medical Technologist lab		1	1
Support Staff	1		1
Cleaner		1	1
Total	**5**	**2**	**7**

COMPONENT 7: MEDICINES/DRUGS

List of medicine to be available at a USC/RD/UH&FWC is given in Table 24.

Table 24: List of Medicine at a USC/RD/UH&FWC

Anaesthetics and Preoperative Medications	**Immunological**
2% Lignocaine with or without Adrenaline	Tetanus Toxoid
Analgesics, Antipyretics, Non-steroidal Anti-inflammatory	BCG vaccine
	Pentavalent vaccine (DPT, Hepatitis B, Hib)
Aspirin	Pneumococcal vaccine (PCV)
Paracetamol	Poliomyelitis vaccine (OPV & IPV)
Ibuprofen	MR vaccine (Measles & Rubella)
Antiallergics and Medicines in Anaphylaxis	Measles vaccine
Chlorpheniramine Maleate	Hepatitis-B vaccine
Anticonvulsants/Antiepileptics	**Ophthalmological Preparations**
Phenobarbitone	Gentamycin
Magnesium Sulphate 50%	Tetracaine/Amethocaine
Anti-infective Medicines	**Oxytocic and Other Obstetrics Drugs**
Mebendazole	Oxytocin
Albendazole	Misoprostol
Amoxycillin	Mifepristone
Phenoxymethyl Penicillin	**Medicines for Mental and Behavioural Disorders**
Benzathine Penicillin	
Procaine Penicillin	Diazepam
Cephalexin	**Medicines acting on the respiratory tract**
Amoxiclav	Salbutamol
Erythromycin	Inhaler
Doxycycline	Theophylline
Co-Trimoxazole	**Solutions Correcting Water, Electrolyte, and Acid-base Disturbances**
Metronidazole	
Rifampicin with or without Isoniazid	Oral Rehydration Salts (ORS)
Rifampicin + Isoniazid + Pyrazinamide with or without Ethambutol	Hartmann Solution
	DNS 5%
Rifampicin + Isoniazid + Ethambutol	Glucose
Clotrimazole	Glucose with sodium chloride
Nystatin	0.9% Sodium chloride (normal saline)
Artemether with Lumefantrine	**Vitamins and Minerals**
Primaquine	Ascorbic Acid/Vitamin C
Chloroquine	Vitamin A
Flucloxacillin	Vitamin B-Complex
Azithromycin	Vitamin K
Antimigraine Medicines	Calcium
Acetylsalicylic Acid	Ferrous Sulphate/Fumarate, with or without Folic Acid
Cardiovascular Medicines	
Hydrochlorothiazide	Folic Acid
Amlodipine	Zinc
Losartan potassium	**Disinfectants and Antiseptics**
Atorvastatin	Chlorhexidine with or without Cetrimide

Table 24: List of Medicine at a USC/RD/UH&FWC	
Dermatological Medicines (topical)	Chlorhexidine 7.1% for cord application
Miconazole	**Hormones, other Endocrine medicines, and Contraceptives**
Potassium permanganate	Gliclazide
Silver Sulfadiazine	Ethinylestradiol + Levonorgestrel
Gentian Violet	Ethinylestradiol + Lynestrenol
Neomycin sulphate with Bacitracin	Desogesterol + Ethinylestradiol
Salicylic Acid + Benzoic Acid	Levonorgestrel
Benzyl Benzoate	Depot Medroxyprogesterone
Ear, Nose and Throat Conditions in Children	Copper-T containing device
Ciprofloxacin	Male Condoms
Gastrointestinal Medicines	Levonorgestrel-releasing implant
Aluminium Hydroxide Gel with or without Magnesium Trisilicate	Metformin Hydrochloride
Famotidine	
Proton Pump Inhibitors (PPIs)	
Omeprazole	
Metoclopramide Hydrochloride	

COMPONENT 8: EQUIPMENT

List of equipment to be available at the USC/RD/UH&FWC is given Table 25.

Table 25: Equipment at the USC/RD/UH&FWC

Stethoscope	Mask
Blood Pressure Measuring Instrument	Sucker machine
Otoscope	Glucometer
Thermometer	Portable spotlight
Vision Testing Chart	Nasal specula
ARI Timer	Normal delivery set (sheets, apron, blades, thread)
Torches	Neonatal resuscitation trolley (Ambu bag with baby mask)
Weighing scale	Cannula (18g, 20g, 22g, 24g)
Hanging scale	Saline set
Height measuring board	Micropore
Measuring Tape	Syringe (3cc, 5cc, 10cc)
Growth Monitoring Chart	Gloves (sterile and non-sterile)
Nebulizer	Autoclave machine
Glucometer with strip box	Needle holder
Scissors	Suture material
Forceps (tissue, artery, tooth, plain)	Boiling machine
Head Mirror with head band	Refrigerator
Ear specula	Auto analyser
Ear syringe	Electrocardiogram (ECG) (machine readable)
Foetal stethoscope (Pinard Horn)	Ultrasound machine
Saline (drip) stand	
Manual Vacuum Aspiration (MVA) Set	
Oxygen cylinder	
Oxygen regulator	

COMPONENT 9: OTHER LOGISTICS

List of logistics at the USC/RD/UH&FWC is given Table 26.

Table 26: List of other logistics at the USC/RD/UH&FWC

Furniture and Fixtures	**Infection Prevention**
Patient Examination Table	Soap
Stool	Sanitizer
Patient bed	Running Water
Steel Almirah	Disinfectant
Back-rest bench for 4-5 persons	Detergent
Mat/cushion bed for service receiver	Hand gloves
Table with drawers	Buckets, bowls, mugs, brushes, brooms, dusters & others
Laboratory table with rack	Toilet cleaner
Dispensing table	Phenyl
Chairs	Face masks
Labour table	Small autoclave
Medicines Rack	Surgical masks and caps
Registers	Eye protector
Growth monitoring chart	Apron
Facility Infrastructure	Needle crusher
Tube well	**Consumables**
Electric fans and lights	Syringes and needles
Sanitation sewage system	Gauze
Medical Waste Management	Bandage
Colour coded waste bins	Latex gloves or Hand gloves
Biohazard bags	Strips for RDT
Waste bags	Cotton Wool
Waste carrying trolley	Laboratory reagents
Heavy duty gloves	**Safety**
Spade and other digging tools[29]	Firefighting equipment (extinguisher, blanket etc.)
PPE Equipment	CCTV cameras

[29] For waste pit

COMPONENT 10: DIGITALIZATION & INFORMATION TECHNOLOGY

The USC/RD/UH&FWC to be fully digitalized in its operation, correspondence with higher authorities and report transmission. All patients/clients seeking health service will be assigned a permanent patient ID number (PID). These PIDs will be derived from the patient/client's birth registration number[30] or the National identification number (NID)[31], contingent upon their age. The PIDs will be utilised to monitor previous records upon the patient/client's visit to the **USC/RD/UH&FWC**, allowing service providers to examine the patient's medical history. Additionally, these PIDs to be at all other government health facilities. The electronic transmission of patient/client data to the current DGHS platform to occur on a regular basis. Digitalization will also be incorporated into the referral process of patients between public health facilities and at the pharmacies through the electronic drug management information system.

The Local Area Network (LAN) to be used to connect different service providers such as the consulting person, pharmacist, laboratory technologist, midwife, to electronically transmit information of attending patient/client.

To operationalise the digitisation the following logistics and equipment will be required:

1. Laptop/computer
2. Printer
3. Internet – modem and SIM card.
4. Local Area Network (LAN)
5. Web-based app for patient registration and Electronic Medical Record

[30] for under 18 years

[31] for 18 years and above

COMPONENT 11: PHYSICAL/INFRASTRUCTURE FACILITIES

As the standards are proposing one more additional staff, that is the medical technologist (lab), additional space is required. Therefore, the standards suggest a redesign of the USC/RD/UH&FWC to incorporate the following requirements.

Table 27: Infrastructure standards at the USC/RD/UH&FWC

1. Display and signage	a. Facility signboards and opening hours displayed at the facility entrance(s) in Bangla b. Adequate and clear signage to be displayed on the main and connecting roads to the facility. c. Citizen charter is displayed at the USC/RD/UH&FWC entrance in Bangla. d. List of available medicine is displayed and updated daily e. Safety, hazard, and caution signs prominently displayed at relevant places. f. Important information such as contact numbers (e.g., fire, police, ambulance, and referral centers) clearly displayed g. The services to be provided, cleaning schedule, monthly performance chart and relevant behaviour change communication (BCC) messages should be clearly displayed in the rooms
2. Maintenance	a. Facility premises to be well maintained and free from • Garbage • Commercial banners, posters, and paintings • Non-functioning equipment • Unauthorised establishments b. The facility building is neat and clean. Staff follow written policies and procedures and schedules for: • Disinfection and cleaning of all equipment, furniture, floors, walls, storage areas and other surfaces and areas
3. Usability	a. The USC/RD/UH&FWC to be user friendly for all, including the disable. • Use of ramps where needed to ensure elderly and disabled friendly access (such as the use of wheelchairs) b. The USC/RD/UH&FWC is well lit and ventilated c. There are always clear pathways to and from exits. d. Floor surfaces are anti-skid and non-slippery.
4. Rooms	a. The USC/RD/UH&FWCs to be constructed on an elevated land to protect the facility from flooding and water logging. b. The facilities to be located with good road availability to ensure easy access c. Waiting area for clients/patients and attendants • There are designated separate male and female waiting areas d. Three consultation rooms: • Doctor's consultation room with attached toilet • One counselling room (SACMO) • Midwife/ANC room (beside labour room) e. Laboratory f. Pharmacy cum medical storeroom g. General storeroom h. Labour room with attached toilet facilities and running water supply

Table 27: Infrastructure standards at the USC/RD/UH&FWC	
	i. At least, two waiting lobbies, segregated for male and female with adequate seating arrangement, benches with backrest. j. Two segregated toilets for male and female, with running water supply k. Two handwashing facilities with availability of running water, liquid soap and/or sanitizer. One for the service providers fitted inside a consultation room and the other for the service recipient fitted inside the waiting lobby. l. Use of ramps where needed to ensure elderly and disabled friendly access (such as the use of wheelchairs) m. Accommodation facility for the midwife at the USC/RD/UH&FWC so that the midwife can provide 24/7 services
5. **Utilities**	a. Electricity: supply connection with back-up power through generator/solar b. Water: Provision of safe drinking water c. Sanitation: drainage system should be cleaned and maintained d. Fire Safety: fire extinguishers and fire hoses are visible and accessible in strategic areas. e. Waste management provision to be kept in relevant areas to make the facility clean, safe and environment friendly.

COMPONENT 12: INFECTION PREVENTION & CONTROL INCLUDING MEDICAL WASTE MANAGEMENT

Infection prevention and medical waste management (MWM) is paramount in health care facilities as it protects both patients and healthcare workers from diseases. Without controlling the spread of infection, hospitals would become unsafe to go to or visit and operate.

Table 28: Infection prevention and MWM measures at the USC/RD/UH&FWC

Infection Prevention & Control	
1. Cleanliness	a. The facility, equipment and supplies are kept clean and safe for clients/patients, visitors/attendants, and staff. b. Facility premises are free from litter and other refuse. c. Equipment, floors, and walls are free from body fluids, dust, spit, and grit. • Disinfectant and detergent should be used for cleaning the floor and wall as applicable. • Cleanliness shall always be maintained by washing and mopping with disinfectants. • Toilets should be cleaned using disinfectant and detergent as applicable.
2. Hygiene	a. Availability of running water supply, soap, alcohol-based hand disinfectant b. Regular handwashing with soap and/or use of sanitizers
3. Guidelines	a. Guidelines for standard hand washing and infection prevention procedures should be displayed
4. Protective Equipment	a. Availability of face mask, hand gloves b. Regular use of face mask and hand gloves by the service providers
5. Disposal	a. Safe final disposal of medical waste in accordance with the Medical Waste (Management and Processes) Rules 2008 b. Use of auto disposable syringes and needles and disposing them appropriately with medical waste
Medical Waste Management (MWM)	
4. Guidelines	**a.** The USC/RD/UH&FWC should have a documented waste disposal strategy specifying protocols, responsibilities, a schedule for waste collection, and list of necessary equipment (e.g., waste bins and bags). b. A clear guide for waste segregation and storage to be visibly posted in area(s) where medical waste is generated. • This should include waste segregation in clearly labelled coded bins in accordance with the Medical Waste (Management and Processes) Rules 2008. • IEC materials promoting awareness campaign on medical waste management to be displayed at the facilities for both service providers and recipients
5. Capacity building	a. Periodic capacity building needed for staff handling infectious waste on hazards of waste, management of waste and infection control.
6. Maintenance and logistics	a. All waste must be protected from theft, vandalism or scavenging by persons or animals. b. Waste to be segregated at its origin. c. Different color-coded bins to be available in sufficient numbers.

Table 28: Infection prevention and MWM measures at the USC/RD/UH&FWC	
	d. Medical waste should be correctly and appropriately disposed of as per the protocol (details in Table 29)

Table 29: Medical waste management protocol at the USC/RD/UH&FWC

Segregation of wastes at source of origin into:	Coloured bins:	Disposing off method
1. Non-hazardous/infectious, general waste	Black	Burn and/or Burry (in a separate pit[32] than the infectious, hazardous one)
2. Non-hazardous with recycled items	Green	Recycle
3. Hazardous, Infectious waste	Yellow	Burn and/or bury (in a pre-prepared pit[33])
4. Hazardous, Infectious liquid waste	Blue	Add disinfectant and keep it for 30 minutes and then throw it down the drain.

[32] Floor of the waste pit should not be covered with concrete or any other means.
[33] Floor of the waste pit should not be covered with concrete or any other means.

COMPONENT 13: MANAGEMENT

Table 30: Management of the USC/RD/UH&FWC
1. The Medical officer serves as the in-charge of the center and is responsible for overseeing and ensuring the proper functioning of the facility.
2. HR, finance, medicines to be provided by the DGHS.
3. Midwives are deployed by the Directorate General of Nursing and Midwifery (DGNM)
4. UH&FPO supervises the operation of the USC/RD/UH&FWCs
5. Maintenance of Client/Patient and other Registers as mandated by the DGHS
6. Grievance Redress Mechanism[34]
7. Signage informing the operating hours and days
8. Availability of latest job description of all the staff
9. USC/RD/UH&FWC will operate from 8:00 AM – 2:30 PM

[34] A Grievance redressal system allows individuals (in this case - patients, clients, attendants, visitors of a health facility) to voice their complaints and concerns (could be regarding the services and/or service provider/other staff) to the respective authorities who in turn respond by redressing, where possible, otherwise informing the situation. For service delivery facilities this is an indication of governance demonstrating accountability to the citizens. There are many grievance redressal systems in place, such as the 16263 call centre number at DGHS or the establishment of a complaint box that is periodically opened after which the complaint receipt and response from the authority are publicly displayed.

COMPONENT 14: HEALTH AND SAFETY

This component is designated to protect the health and safety of clients/patients, staffs and visitors and allow the service delivery to be safe, accessible and respect clients'/patients' need for privacy.

Table 31: Health and Safety requirements at a USC/RD/UH&FWC	
1. Policies	a. Health and safety policies, procedures and standard protocols are available, displayed and followed by staff to: • Prevent contamination incidents related to health care waste. • Follow a sharps and needle-stick injuries (NSI) reporting system, with proper segregation and disposal of sharps. • Provide basic life support
2. Vaccination	a. Ensure appropriate vaccination for the staff of the center
3. Fire Safety	a. Availability of firefighting equipment (fire extinguisher, and fire blanket) b. Trained staff who conduct periodic mock drills.
4. Storage	a. Chemicals, medicine, and equipment are stored safely, as per protocols
5. Protective Equipment	a. Staff are provided with and use protective equipment, e.g., gloves, aprons, masks for safe handling of hazardous material.
6. Surveillance camera (CCTV) systems	a. Surveillance camera (CCTV) systems installed both inside and outside the facility to ensure: • the safety and security of service providers, and patients, and • prevent the theft of medicine and equipment. b. Recording should be preserved for a minimum of one year.

Bangladesh National Health Services Standards

Volume 1C: Urban Health Care Centre (proposed name of existing Government Outdoor Dispensary)

To ensure effective delivery of essential health service package: Towards Universal Health Coverage through Primary Health Care approach in Bangladesh

VOLUME 1C: NHSS FOR URBAN HEALTH CARE CENTRE (PROPOSED NAME OF EXISTING GOVERNMENT OUTDOOR DISPENSARY)

Government Outdoor Dispensaries (GOD) are urban healthcare facilities managed by the DGHS. A total of 35 GODs operate across various locations (DGHS, 2024): 17 in Dhaka (North and South) City Corporations, 9 in Chattogram City Corporation, 3 each in Rajshahi and Khulna City Corporations, and 1 each in Sylhet City Corporation, Dinajpur, and Nilphamari municipalities. In the 5th Health, Population and Nutrition Sector Programme 2024-2029, government is planning to make more such facilities functioning (through various modalities) in all the city corporations and district municipalities. As the current name implies, these facilities provide out-patient services. Government decided to operate these facilities in two shifts. The name GOD is proposed to replace as Urban Health Care Centre (UHCC).

Since the number of Government Outdoor Dispensaries are limited in number, the govt has plans to set up more similar facilities and it is proposed that the center be renamed Urban Health Care Centre. Hence, going forward, the National health Services Standards will refer to the Government Outdoor Dispensary using the proposed name, that is Urban Health Care Centre.

COMPONENT 1: PROMOTIVE AND PREVENTIVE SERVICES

Promotive and preventive care services include measures taken to prevent diseases and control once developed. These include providing regular information, regular screenings, and counselling on healthy lifestyle, also immunizations, and contraceptives to urban populations.

Table 32: Promotive and Preventive Services at the Urban Health Care Centre	
1. Antenatal Care (ANC)	a. Clinical history b. Diagnosis of pregnancy c. Obstetric and foetal assessment[35] d. Information and counselling on nutrition, pregnancy complications, post-partum family planning e. Investigation • Urine test • Haemoglobin (Hb) estimation • Blood grouping and Rh typing • Blood sugar • Ultra sonogram • Testing for HIV (with counselling), Syphilis f. Supply of Iron, Folic Acid (IFA), Zinc and other micronutrients g. Birth Preparedness Plan[36] • Referral hospital • Identification of transportation means. • Setting aside money (by gradual savings – weekly) • Identification of blood donor h. Identify and Manage pregnancy complications. • Anaemia • Urinary tract infection • Hypertension • Diabetes • Sexually Transmitted Infections (STIs) • HIV/AIDS (Counselling and testing)
2. Newborn care after delivery	a. Counselling about breastfeeding, nutrition, immunization, etc. b. Weighing, temperature management and cord care c. Prevention of neonatal conjunctivitis d. Detection and management of sepsis e. Detection and management of omphalitis f. Diagnosis and management of neonatal jaundice g. Identification and management of breastfeeding problems
	a. Clinical history (pain, fever, haemorrhage, convulsion etc.)

[35] Maternal weight; BP measurement; Oedema; Fundal height; Foetal heartbeat.

[36] Birth preparedness plan is for making the delivery safe. this includes identifying a hospital for the institutional delivery/ caesarean section (if needed); identifying transportation particularly for odd hours; delivering in a facility will incur expenses that is why practice of weekly saving during pregnancy will assist in meeting that expense; and caesarean section may require blood therefore identifying potential blood donor(s) (of the same blood group) and making arrangement for those potential donor(s) to accompany the pregnant women to the health facility will ensure blood if required, seamlessly.

Table 32: Promotive and Preventive Services at the Urban Health Care Centre	
3. Postnatal Care (PNC)	b. Counselling on postnatal care, breastfeeding, nutrition, immunization, etc. c. Management of postnatal complications • Anaemia • Puerperal psychosis d. Management of obstetric complications • Haemorrhage • Puerperal infection/sepsis e. Supply of Iron, Folic Acid (IFA), Zinc and other micronutrients f. Post-partum Vitamin A supplementation g. Counselling and Provision of family planning methods
4. Expanded Programme on Immunization (EPI)	a. Counselling parents on immunization and adverse effect (AEFI) b. Reporting and management of AEFI c. Follow-up of defaulters (drop-out) d. Follow up on detection of adverse effects. e. Child vaccination f. Tetanus Toxoid and Human Papillomavirus (HPV) vaccine for adolescent girls, pregnant women (as applicable) g. Surveillance of vaccine-preventable diseases
5. Family Planning (FP)	a. Family Planning counselling • Newly married couple • Birth Spacing, contraceptive methods and adverse effects. b. Advocacy and awareness development on • Postpartum (PP) FP • Post-menstrual regulation (MR) FP • Post-abortion care (PAC) FP c. Screening according to Medical Eligibility Criteria (MEC) for contraceptive use • Pre-Conception FP • Male Condoms • Oral contraceptives • Initiation of depot medroxyprogesterone acetate (DMPA) injection • DMPA injection continuation • Intrauterine devices • Postpartum Intrauterine Device (IUD) Insertion • Implant placement • Providing Post-partum FP • Providing post-menstrual regulation (MR) FP • Providing post-abortion care (PAC) FP d. Management of contraceptive use complications
6. Malnutrition management	a. Growth Monitoring and Promotion b. Screening for malnutrition (under nutrition and over nutrition) c. Counselling parents about breastfeeding and best feeding practices d. Iron, Folic Acid, Calcium, Zinc and Micronutrient supplementation e. Promotion of Infant and Young Child Feeding (IYCF) • breastfeeding within an hour of birth • exclusive breastfeeding for 6 months

Table 32: Promotive and Preventive Services at the Urban Health Care Centre	
	• breastfeeding until 23 months of age • appropriate complementary feeding
7. Integrated Management of Childhood Illness (IMCI)	a. Counselling parents on danger signs, nutrition of the sick child, etc. b. Identification of danger signs and referral[37]
8. Adolescent health	a. Counselling on • Puberty • Safe sexual behaviour • Prevention of early marriage • HIV/AIDS • Substance abuse • Family planning • Mental health • Others b. Family Planning service provision c. Adolescent nutrition • Assessment • Supply of Iron, Folic Acid (IFA) and Zinc d. Screening for Sexually Transmitted Infections (STI) e. Adolescent Sexual and Reproductive Health f. Counselling on risk taking behaviour.
9. Non-Communicable Diseases (NCD)	a. Clinical screening and counselling for risk factors related: • Family History of cardiovascular diseases (CVD) / diabetes mellitus (DM) / kidney disease • High Blood Pressure • High Total Cholesterol • High Blood Sugar • Smoking • Overweight b. Cancer • Counselling on screening of cervical, breast and prostate cancers • Teaching of breast self-examination • Clinical Breast Examination c. Mental health • Counselling on identification and support to mental health cases, including overcoming stigma and others.
10. Communicable diseases	a. Promote the prevention of communicable diseases such as malaria, dengue, chikungunya, tuberculosis (TB), COVID 19, diarrhea, hepatitis, scabies, personal hygiene, air-borne diseases, influenza, and others b. Distribution of long-lasting insecticides nets (LLINs) and counselling on their use alongside other repellants c. Counsel on the prevention of HIV/AIDS

[37] inability to drink or breastfeed; vomits everything; convulsions; lethargic or unconscious.

Table 32: Promotive and Preventive Services at the Urban Health Care Centre	
	d. Counsel on the prevention and identification of Sexually Transmitted Infections
11. Water-Borne Diseases	a. Counsel on the storage and consumption of safe drinking water (free from pathogens and other substances such as arsenic) b. Identification and symptomatic treatment of arsenicosis due to drinking of arsenic contaminated water.
12. Food-Borne Diseases	a. Counselling on storage and consumption of fresh food (avoiding adulterated food, rotten, exposed to flies and dust, and others) b. Counselling on avoiding the consumption of junk food and beverages.
13. Social and Behavioural Change Communication (SBCC)	a. Promotion of health, family planning, and nutrition, including child survival and safe motherhood b. Promotion of essential newborn care practice and identification of danger signs for early care seeking c. Awareness on causes, prevention and control of TB and other communicable diseases d. Promote healthy lifestyle for hypertension and other NCD control. e. Counselling on the consumption of safe water – free from pathogens and arsenic f. Promotion of oral hygiene g. Awareness on child injury and drowning prevention measures h. Health Education related to disability and rehabilitation – promotion of identification of persons with disability and family care taking of the disabled persons. i. To identify, understand and address causes and consequences of gender-based violence (GBV). j. To raise awareness of GBV health services and refer GBV survivors to health facilities.

COMPONENT 2: CURATIVE CARE SERVICES

Curative care services aim at providing treatment for curing illness and/or injury with referral of emergencies and complicated cases to higher level facilities for proper management.

Table 33: Curative care services at the Urban Health Care Centre	
1. **Integrated Management of Childhood Illness (IMCI)**	a. Management of moderate Diarrhoea[38] b. Management of Moderate Acute Respiratory Infection (ARI)[39] c. Identification of danger signs[40] and referral
2. **Limited Curative Care**	a. Eye care • Treatment of acute conjunctivitis • Treatment of corneal ulcer • Detection of cataract and visual impairment b. Skin care • Treatment of common skin diseases[41]
3. **Management of Ear, Nose and Throat (ENT) Problems**	a. Ear care • Removal of wax and foreign body • Acute ear infection • Chronic ear infection • Mastoiditis • Awareness on prevention of hearing impairment • Management of acute suppurative otitis media • Management of chronic otitis media b. Throat care • Tonsilitis • Pharyngitis
4. **Management of fever and febrile diseases**	
5. **Communicable Disease Management**	a. Tuberculosis (TB) • Directly observed treatment, short-course (DOTS) compliance as per treatment protocol b. Malaria (in endemic areas only) • Rapid Diagnosis and Treatment • First line treatment with uncomplicated case as per National Malaria Elimination programme c. Dengue, Chikungunya • Outpatient Management d. Neglected Tropical Diseases (NTDs) (kala-azar, lymphatic filariasis, leprosy, and others) • Identification and Outpatient Management
6. **Non-Communicable**	a. Type-II Diabetes b. Hypertension - Diagnosis, Management and Follow-up

[38] Presence of at least three of the following signs: (1) Restless, irritable; (2) Sunken eyes; (3) Drinks eagerly, thirsty and (4) Skin pinch goes back slowly.
[39] Cough, cold, mild pneumonia
[40] inability to drink or breastfeed, vomits everything, has/had convulsions, lethargic or unconscious.
[41] Scabies; Ringworm; Impetigo; Dermatitis; Eczema

Table 33: Curative care services at the Urban Health Care Centre	
Disease Management	c. Mental Health – Counselling, Identification and Referral d. Respiratory illness • Asthma (acute and chronic)
7. Obstetric Care Management	a. Personal and obstetric history b. Examination • Foetal position • Foetal heartbeat c. Mild and moderate anaemia
8. Newborn Care Management	a. Newborn Care after delivery • Weighing, temperature management and cord care • Identification and management of sepsis • Identification and management of omphalitis • Identification of congenital anomalies
9. Adolescent Health	**a.** Syndromic management of Sexually Transmitted Infections (STIs) b. Supply of Iron, Folic Acid (IFA) and other micronutrients
10. Undernutrition management	a. Moderate Acute Malnutrition b. Severe Acute Malnutrition (SAM), Uncomplicated c. Anaemia and underlying causes of Anaemia
11. Sexual and Gender Based Violence	a. Case identification b. First-point counselling c. Emergency contraception d. Treatment of minor injuries e. Prophylaxis for STI f. Psychological support g. Medic-legal examination
12. Emergency Care Management	a. First aid b. Minor injuries c. Allergic reactions[42] d. Cardiopulmonary Resuscitation (CPR) e. Identification of animal bite (snake bite, dog bite, cat bite, fox bite)

[42] Bee sting, food allergy, dust allergy, rhinitis, sinusitis

COMPONENT 3: DIAGNOSTIC SERVICES

Diagnostic tests are to support the service provider in providing appropriate treatment. An indicative list of diagnostic services that should be available at the Urban Health Care Centres, is provided in Table 34 below.

Table 34: List of diagnostic services[43] at the Urban Health Care Centre

Laboratory	Radiology and Imaging
Urine Pregnancy Test	Ultrasonography
Urine Strip Test:	Electrocardiogram (ECG)
• Protein	X-Ray
• Glucose	
Rapid Diagnostic Tests (RDT)	
• Malaria (in endemic areas)	
• Dengue non-structural protein 1 (NS1)	
• Kala-azar (in endemic areas) – rK39	
• Blood glucose test using glucometer	
Haematology	
• Haemoglobin	
• Haematocrit	
• Platelets count	
• Red Blood Count (RBC)	
• White Blood Count (WBC)	
• Bleeding and clotting time	
• Blood grouping and Rhesus (Rh) typing	
Biochemistry	
• Blood sugar	
• Serum creatinine	
• Serum cholesterol	
• Blood urea	
• Blood lipid profile	
• Bilirubin	
• Serum Glutamic Pyruvic Transaminase (SGPT)	
• Serum Glutamic Oxaloacetic Transaminase (SGOT)	
• Alkaline phosphatase	
• Hepatitis B Virus (HbsAg)	
• Screening test for syphilis –Venereal Disease Research Laboratory (VDRL)	
• Rapid Plasma Reagin (RPR) test	
Cervical cancer screening with Visual Inspection with Acetic Acid (VIA) test	

[43] The proposed laboratory, radiology, and imaging services (staff and equipment) can be made available at the Urban Health Care Centre or the services can be procured from the private sector.

COMPONENT 4: PHARMACY SERVICES

The pharmacy services aim to prevent drug misuse, and safely store the drug in the Urban Health Care Centres.

Table 35: Pharmacy services at an Urban Health Care Centre	
1. Requisition	a. Average consumption and time required after submitting a requisition are to be considered before placing a requisition
2. Infrastructure	a. Medicines are stored on shelves, ensuring: • Protection from the adverse effects of light, dampness, and extreme temperature • Free from vermin and insects • Adequate ventilation b. Access to storage restricted only to authorized personnel. c. Medicine arranged on the racks in alphabetical or pharmacological order considering the expiration date.
3. Stock Control and Record Keeping	a. List of available drugs/medicine are displayed outside the dispensary b. All medicines are available and adequately stocked (ensure availability for at least three months) c. Medicine stock register updated regularly and maintained. That is name, quantity, date of receipt recorded in the stock register at the time of receipt. • Item description • Unit of issue (mg, mL etc) • Receipt of date and issue of stock d. Medicines are dispensed with effective counselling.
4. Effective Stock Rotation and Expiry Monitoring	a. Follow the First In, First Out (FIFO) principle in conjunction with expiry dates for inventory management b. The expiry dates should be checked at the time of receipt and noted in the stock record register. c. Stock nearing expiry should not be accepted unless it can be used before expiry. d. Medicine expiry dates should be regularly monitored and expired medicine should be immediately segregated and then disposed as per medical waste management protocol. e. Record of drugs expired during the month to be maintained in the register (including date, medicine name, quantity etc.) f. All items are checked for non-moving as well as those items whose expiry date is within 3 months, a list is prepared, segregation is done item wise and supplier wise. g. The medicine near to expiration should be reported to the higher authority.
5. Demonstration of Good Pharmacy Practices	a. Maintain requisition slips, registers, storage, dispense with counselling b. Verification of the patient/client before medications are handed over c. Reconfirming the medication, timing, and the dosage amount with the prescription

COMPONENT 5: REFERRAL

The purpose of a structured referral system is to introduce an efficient upward and downward referral system to maximise the utilisation of Urban Health Care Centres and minimise the patient load on higher facilities. A healthcare referral system involving health facilities at various levels is recommended in Figure 5 to ensure that patients in need have access to high-quality medical resources.

The upward referral of patients, denoted by a green arrow, is from Urban Health Care Centres to District/General and Medical College Hospitals. The downward referral of patients occurs when Urban Health Care Centres receive patients from District/General and Medical College Hospitals, as denoted by an orange arrow.

Figure 5: Referral pathway from the Urban Health Care Centres

Effective referral requires clear communication with the referred facility to ensure optimal patient care. The health provider is responsible for updating the referral register and filling out the patient referral form with all necessary information. All referral patients are to be provided with appropriate care. Equal importance to be given to downward referrals.

A referral receiving and tracking system at the facilities will ensure that referred patients/clients receive priority treatment and necessary support upon their arrival at the healthcare facility. Digital technology to be used to make it efficient for patients as well as service providers. The reasons for referral from an Urban Health Care Centres are listed in

Table 36: Patients to be referred from the Urban Health Care Centre

1. Antenatal Care	• Pregnancy complications ✓ Hypertension ✓ Diabetes Type II • Identify and manage pregnancy complications and associated severe infections. ✓ Anaemia ✓ Malaria (in endemic areas) ✓ Severe Urinary tract infection ✓ Sexually Transmitted Infections • Identify, stabilize, and refer pre/eclampsia. • Ante-partum haemorrhage • Abdominal pain in pregnancy • Premature rupture of membranes • Obstructed labour • Prolapsed cord/hand

Table 36: Patients to be referred from the Urban Health Care Centre	
	• Manual removal of placenta
2. **Postnatal care**	Postnatal complications • Excessive bleeding • Anaemia • Puerperal sepsis • Postpartum psychosis Identification and management of obstetric complications • Haemorrhage • Puerperal infection/sepsis • Obstetrics fistula • Genital prolapse
3. **Child health**	• Omphalitis • Congenital anomalies • Special care of pre-term or LBW neonate • Management of LBW babies • Management of neonatal jaundice • Management of breastfeeding problems • IMCI having danger signs ✓ inability to drink or breastfeed. ✓ vomits everything. ✓ has/had convulsions. ✓ lethargic or unconscious
4. **Nutrition**	• Severe Acute Malnutrition, complicated
5. **NCD**	• Mental health conditions • Management of hypertension
6. **CD**	• Identify suspected HIV/AIDS cases. • HIV/AIDS (counselling and testing)
7. **Other**	• Major injuries • Poisoning • Animal bite (snake bite, dog bite, cat bite, fox bite) • Suspected TB, malaria, leprosy, filariasis, kala azar, dengue, chikungunya, acute water diarrhoea, etc. • Adverse effect following immunization (AEFI) • Burns after initial management. • Drowning • Lightning
Patients should be referred from the Urban Health Care Centres to the District/General and Medical College Hospitals • For any of the conditions listed above • If the treatment provided at the Urban Health Care Centres does not improve the patient's condition • For any other condition not mentioned in the list above for which the diagnosis requires further investigation and advanced management	

COMPONENT 6: HUMAN RESOURCES FOR HEALTH

In addition to the existing staff, a range of positions has been proposed to provide services across the two shifts of services at the Urban Health Care Centres (Table 37).

Table 37: List of Human Resources for Health for the Urban Health Care Centres (2 shifts)

Staff	Existing	Proposed New	Total
Medical officer	3	2	5
Sub-Assistant Community Medical Officer (SACMO)		2	2
Nurse		2	2
Pharmacist	1	1	2
Computer Operator cum ticket clerk		2	2
Medical technologist lab		2	2
Peon		2	2
Cleaner		2	2
Guard		3	3
Total	**4**	**18**	**22**

COMPONENT 7: MEDICINE

List of medicine to be available at the Urban Health Care Centre is listed in Table 38.

Table 38: Medicine list at an Urban Health Care Centres.

Analgesics, Antipyretics, Non-steroidal Anti-Inflammatory	**Diuretic**
Paracetamol	Furosemide
Ibuprofen	**Dermatological Medicines (topical)**
Diclofenac sodium	Miconazole Nitrate
Indomethacin	Silver Sulfadiazine
Hyoscine Butyl-bromide	Salicylic Acid + Benzoic Acid
Antiallergics and Medicines in Anaphylaxis	Benzyl Benzoate
Chlorpheniramine Maleate	Econazole
Desloratadine	Clotrimazole
Cetirizine	Permethrin
Montelukast	**Gastrointestinal medicines**
Anti-infective Medicines	Antacid chewable
Mebendazole	Syrup antacid plus
Amoxycillin	Omeprazole
Penicillin	Esomeprazole
Doxycycline	Domperidone
Co-Trimoxazole	Pantoprazole
Azithromycin	**Vitamins and Minerals**
Fluconazole	Ascorbic Acid/Vitamin C
Levofloxacin	Vitamin A
Ciprofloxacin	Vitamin B-Complex
Cefixime	Vitamin K
Cefradine	Calcium
Flucloxacillin	Ferrous Sulphate/Fumarate, with and without Folic Acid
Tetracycline	Folic Acid
Chloramphenicol Eye Drop	Zinc
Medicines acting on the respiratory tract	**Disinfectants and Antiseptics**
Salbutamol	Chlorhexidine with or without Cetrimide
Solutions Correcting Water, Electrolyte, and Acid-Base Disturbances	Povidone-Iodine 10%
Oral Rehydration Salts (ORS)	**Hormones, Other Endocrine Medicines & Contraceptives**
Cholera Fluid	Gliclazide
Dextrose in Water 5%, 25% and 50%	Ethinyl Estradiol + Lynestrenol
Glucose	Desogesterol + Ethinyl Estradiol
Glucose with sodium chloride	Levonorgestrel
Sodium chloride	Depot Medroxyprogesterone
Medicines for Mental & Behavioural Disorders	Copper-T containing device
Diazepam	Male Condoms
Cardiovascular Medicines	Levonorgestrel-releasing implant
Atenolol	Insulin, short acting
Amlodipine	Metformin
Atorvastatin	

COMPONENT 8: EQUIPMENT

List of equipment to be available at the Urban Health Care Centre is provided below.

Table 39: List of equipment required at the Urban Health Care Centre

Stethoscope	General scissors
Blood Pressure Measuring Instrument	Tongue depressor
Thermometer	Hand/foot splint wooden
Vision testing chart	Kidney tray
Timer	Hb estimators
Torch	Blood grouping kit
Scissors	Disposable lancet
Medium Sized Artery Forceps	Test tube and test tube holder
Dressing set	Head light
Weighing machine	Otoscope
Hanging scale	Ear specula
Height measuring board	Ear syringe
Measuring Tape for MUAC	Foetal stethoscope (Pinard Horn)
Umbo bag	Drip stand
Glucometer with Strips	Nebulizer
Leucoplast/ Micropore	Ultrasound machine
Tissue forceps	ECG machine
Needle holder	X-ray machine with auto-processor
Curved cutting needle	
Silk yarn	

COMPONENT 9: OTHER LOGISTICS

List of logistics at the Urban Health Care Centre is given below.

Table 40: List of other logistics required at the Urban Health Care Centre

Furniture and Fixtures	**Infection prevention**
Patient Examination Table	Soap
Stool	Sanitizer
Patient bed	Running water
Almirah	Disinfectant
Back-rest bench for 4-5 persons	Detergent
Mat/cushion bed for service receiver	Hand gloves
Table with drawers	Buckets, bowls, mugs, brushes, brooms, dusters & others
Laboratory table with rack	Toilet cleaner
Medicines Rack	Phenyl
Dispensing table	Sterilizer
Chairs	Small autoclave
Registers	Needle crusher
Growth Monitoring Chart	Surgical masks and caps
Facility infrastructure	Eye protector
Generators/Solar panel	Apron
Sanitation sewage system	**Consumables**
Air conditioners	Syringes and needles
Electric fans and lights	Gauze
Medical Waste Management	Bandage
Colour coded waste bins	Latex gloves or Hand gloves
Biohazard bags	Strips for RDT
Waste bags	Cotton Wool
Waste carrying trolley	Laboratory reagents
Heavy duty gloves	X-ray films
PPE Equipment	**Safety**
Others	Firefighting equipment (extinguisher, blanket etc.)
Biometric machine for attendance	CCTV cameras

COMPONENT 10: DIGITALIZATION & INFORMATION TECHNOLOGY

The Urban Health Care Centres to be fully digitalized in its operation, correspondence with higher authorities and report transmission. All patients/clients seeking health service will be assigned a permanent patient ID number (PID). These PIDs will be derived from the patient/client's birth registration number[44] or the National identification number (NID)[45], contingent upon their age. The PIDs will be utilised to monitor previous records upon the patient/client's visit to the Urban Health Care Centres, allowing service providers to examine the patient's medical history. Additionally, these PIDs to be at all other government health facilities. The electronic transmission of patient/client data to the current DGHS platform to occur on a regular basis. Digitalization will also be incorporated into the referral process of patients between public health facilities and at the pharmacies through the electronic drug management information system.

The Local Area Network (LAN) to be used to connect different service providers such as the consulting person, pharmacist, laboratory technologist, midwife, to electronically transmit information of attending patient/client.

To operationalize the digitisation the following logistics and equipment are required:

1. Laptop/Desktop computer
2. Printers
3. Dedicated Broadband Internet Connectivity
4. Local Area Network (LAN)
5. Web-based app for patient registration and Electronic Medical Record

[44] for under 18 years

[45] for 18 years and above

COMPONENT 11: PHYSICAL/INFRASTRUCTURE FACILITIES

To accommodate the proposed additional staff at the Urban Health Care Centres, additional space is required with a redesign of the facility incorporated the following requirements as specified in Table 41.

Table 41: Infrastructure Standards at the Urban Health Care Centres

1. Display and signage	a. Facility signboards and opening hours displayed at the Centre entrance(s) in Bangla b. Adequate and clear signage to be displayed on the main and connecting roads to the facility. c. Citizen charter is displayed at the Centre's entrance in Bangla. d. List of available medicine is displayed and updated daily e. Safety, hazard, and caution signs prominently displayed at relevant places. f. Important information such as contact numbers (e.g., fire, police, ambulance, and referral centers) clearly displayed g. The services to be provided, cleaning schedule, monthly performance chart and relevant behaviour change communication (BCC) messages should be clearly displayed in the rooms
2. Maintenance	a. Facility premises to be well maintained and free from • Garbage • Commercial banners, posters, and paintings • Non-functioning equipment • Unauthorised establishments b. The Centre building is neat and clean. Staff follow written policies and procedures and schedules for: • Disinfection and cleaning of all equipment, furniture, floors, walls, storage areas and other surfaces and areas
3. Usability	a. The Centre to be user friendly for all, including the disable. • Use of ramps where needed to ensure elderly and disabled friendly access (such as the use of wheelchairs) b. The Centre is well lit and ventilated c. There are always clear pathways to and from exits. d. Floor surfaces are anti-skid and non-slippery.
4. Rooms	a. The Urban Health Care Centres to be constructed on an elevated land to protect the center from flooding and water logging. b. The facilities to be located with good road availability to ensure easy access c. Waiting area for clients/patients and attendants d. There are designated separate male and female waiting areas e. Consultation rooms: • Two consultation rooms (2 Medical officers) with attached toilets • Two patient counselling/screening room (SACMO, Nurse) f. One laboratory room g. One pharmacy room h. General storeroom i. At least, two waiting lobbies, segregated for male and female with adequate seating arrangement, benches with backrest. j. Two segregated toilets for male and female, with running water supply

Table 41: Infrastructure Standards at the Urban Health Care Centres	
	k. Two handwashing facilities with availability of running water, liquid soap and/or sanitizer. One for the service providers fitted inside a consultation room and the other for the service recipient fitted inside the waiting lobby. l. Use of ramps where needed to ensure elderly and disabled friendly access (such as the use of wheelchairs)
5. **Utilities**	a. Electricity: supply connection with back-up power through generator/solar b. Water: Provision of safe drinking water c. Sanitation: drainage system to be cleaned and maintained d. Fire Safety: fire extinguishers and fire hoses are visible and accessible in strategic areas. e. Waste management provision to be kept in relevant areas to keep the facility clean, safe and environment friendly.

COMPONENT 12: INFECTION PREVENTION & CONTROL INCLUDING MEDICAL WASTE MANAGEMENT

Infection prevention and medical waste management (MWM) is paramount in health care facilities as it protects both patients and healthcare workers from diseases. Without controlling the spread of infection, hospitals would become unsafe to go to or visit and operate.

Table 42: Infection prevention and MWM measures at the Urban Health Care Centre

Infection Prevention & Control	
1. Cleanliness	a. The facility, equipment and supplies are kept clean and safe for clients/patients, visitors/attendants, and staff. b. Facility premises are free from litter and other refuse. c. Equipment, floors, and walls are free from body fluids, dust, spit, and grit. • Disinfectant and detergent should be used for cleaning the floor and wall as applicable. • Cleanliness shall always be maintained by washing and mopping with disinfectants. • Toilets should be cleaned using disinfectant and detergent as applicable.
2. Hygiene	a. Availability of running water supply, soap, alcohol-based hand disinfectant b. Regular handwashing with soap and/or use of sanitizers
3. Guidelines	a. Guidelines for standard hand washing and infection prevention procedures should be displayed
4. Protective Equipment	a. Availability of face mask, hand gloves b. Regular use of face mask and hand gloves by the service providers
5. Disposal	a. Safe final disposal of medical waste in accordance with the Medical Waste (Management and Processes) Rules 2008 b. Use of auto disposable syringes and needles and disposing them appropriately with medical waste
Medical Waste Management	
1. Guidelines	a. The Urban Health Care Centre should have a documented waste disposal strategy specifying protocols, responsibilities, a schedule for waste collection, and a list of necessary equipment (e.g., waste bins and bags). b. A clear guide for waste segregation and storage to be visibly posted in area(s) where medical waste is generated. • This should include waste segregation in clearly labelled coded bins in accordance with the Medical Waste (Management and Processes) Rules 2008. • IEC materials promoting awareness campaign on medical waste management to be displayed at the facilities for both service providers and recipients
2. Capacity Building	a. Periodic capacity building needed for staff handling infectious waste on hazards of waste, management of waste and infection control.
3. Maintenance and Logistics	a. All waste must be protected from theft, vandalism or scavenging by persons or animals. b. Waste to be segregated at its origin. c. Different color-coded bins to be available in sufficient numbers. d. Medical waste should be correctly and appropriately disposed of as per the protocol (details in Table 43)

Table 43: Medical waste management protocol of the Urban Health Care Centers		
Segregation of wastes at source of origin into:	**Coloured bins:**	**Disposing off method**
1. Non-hazardous/infectious, general waste	Black	Burn and/or Burry (in a separate pit[46] than the infectious, hazardous one)
2. Non-hazardous with recycled items	Green	Recycle
3. Hazardous, Infectious waste	Yellow	Burn and/or bury (in a pre-prepared pit[47])
4. Hazardous, Infectious liquid waste	Blue	Add disinfectant and keep it for 30 minutes and then throw it down the drain.

[46] Floor of the waste pit should not be covered with concrete or any other means.
[47] Floor of the waste pit should not be covered with concrete or any other means.

COMPONENT 13: MANAGEMENT

The MOHFW's service delivery system does not extend to the provision of urban PHC except for the Urban Health Care Centres (previously termed as Government Outdoor Dispensaries). The Urban Health Care Centres are supervised by the Civil Surgeons at the district level.

Table 44: Management of the Urban Health Care Centers

1. Senior most available medical officer may be entrusted with the responsibility of being in-charge of the center.
2. Urban Health Care Centres are under the respective Civil Surgeon office
3. All supplies through the Civil Surgeon office
4. Urban Health Care Centres will operate across two shifts:
   - Morning 8:00 AM – 2:00 PM
   - Afternoon 2:00 PM - 8:00 PM
5. Maintenance of Client/Patient and other Registers as mandated by the DGHS
6. Grievance Redressal Mechanism[48]
7. Signage informing the operating hours and days, and availability of staff to be displayed
8. Availability of latest approved job description of the staff
9. Biometric machine for attendance is easily accessible and functional.
   - Time and date are updated.
   - Uninterrupted electric power available
   - All staff are registered.
   - Print out is available on spot
10. Display board with information on available medicine list to be present.

[48] A Grievance redressal system allows individuals (in this case - patients, clients, attendants, visitors of a health facility) to voice their complaints and concerns (could be regarding the services and/or service provider/other staff) to the respective authorities who in turn respond by redressing, where possible, otherwise informing the situation. For service delivery facilities this is an indication of governance demonstrating accountability to the citizens. There are many grievance redressal systems in place, such as the 16263 call centre number at DGHS or the establishment of a complaint box that is periodically opened after which the complaint receipt and response from the authority are publicly displayed.

COMPONENT 14: HEALTH AND SAFETY

This component is designated to protect the health and safety of clients/patients, staffs and visitors and allow the service delivery to be safe, accessible and respect clients'/patients' need for privacy.

Table 45: Health and Safety requirements at an Urban Health Care Center	
1. **Policies**	a. Health and safety policies, procedures and standard protocols are available, displayed and followed by staff to: • Prevent contamination incidents related to health care waste. • Follow a sharps and needle-stick injuries (NSI) reporting system, with proper segregation and disposal of sharps. • Provide basic life support
2. **Vaccination**	b. Ensure appropriate vaccination for the staff of the center
3. **Fire Safety**	a. Availability of firefighting equipment (fire extinguisher, and fire blanket) b. Trained staff who conduct periodic mock drills.
4. **Storage**	a. Chemicals, medicine, and equipment are stored safely, as per protocols
5. **Protective Equipment**	a. Staff are provided with and use protective equipment, e.g., gloves, aprons, masks for safe handling of hazardous material.
6. **Surveillance Camera (CCTV) Systems**	a. Surveillance camera (CCTV) systems installed both inside and outside the facility to ensure: • the safety and security of service providers, and patients, and • prevent the theft of medicine and equipment. b. Recording should be preserved for a minimum of one year.

Bangladesh National Health Services Standards

Volume 2: Upazila Health Complex

To ensure effective delivery of essential health services package: Towards Universal Health Coverage through supporting Primary Health Care approach in Bangladesh

VOLUME 2: NHSS FOR UPAZILA HEALTH COMPLEX

The Upazila Health Complex are DGHS facilities which provides primary healthcare services to the people living in the upazila (sub-district) level. It is an administrative division that functions as a sub-unit of a district. The Upazila Health Complexes are designed to serve as referral centers for community clinics and union level facilities.

Upazila health complexes (UzHC) provides promotive and preventive services through a cadre of field workers (health assistants) supported by the supervisors (Assistant Health Inspector and Health Inspector). The hospital provides inpatient care, outpatient care and emergency services.

The bed strengths vary. Out of 429 UzHC, 11 are 10-bed, 52 are 31-bed, 358 are 50-bed and 8 are 100-bed (DGHS, 2024). Since the majority of UzHCs have 50 beds and are anticipated to do so going forward, the 50-bed UzHC is considered for developing the national health services standards.

COMPONENT 1: PROMOTIVE AND PREVENTIVE SERVICES

All the healthcare providers in the upazila health complex use interactions with the patients and their attendants to promote health and preventive diseases through counselling and services. Hospital OPD and other places where patients or their attendants wait to have provision of audio-visual equipment to display promotive and prevention messages on various issues/topics.

Table 46: Promotive and Preventive Services at the Upazila Health Complex

1. Antenatal Care (ANC)	a. Clinical history b. Identification/diagnosis of pregnancy c. Obstetric and foetal assessment[49] d. Information and counselling on nutrition (1000 days of life), pregnancy complications, post-partum family planning (FP), breastfeeding e. Investigations: • Hb estimation • Blood grouping and Rh typing • Pregnancy test • Blood sugar • Ultrasonogram f. Supply of Iron, Folic Acid (IFA), Zinc and other micronutrients g. Birth Preparedness Plan[50] • Referral hospital • Identification of transportation means. • Setting aside money (by gradual savings – weekly) • Identification of blood donor h. Identify and manage moderate anaemia.
2. Postnatal Care (PNC)	a. Clinical history (pain, fever, haemorrhage, convulsion etc.) b. Counselling on postnatal care, breastfeeding, nutrition, immunization etc. c. Counselling on post-partum eclampsia d. Counselling of postnatal complications • Anaemia • Puerperal sepsis • Post partum psychosis e. Counselling and Provision of Family Planning methods f. Supply of Iron, Folic Acid, Zinc, and other micronutrients g. Post-partum Vitamin A supplementation
3. Newborn Care	a. Promotion of essential newborn care practice and newborn danger signs for early care seeking b. Counselling about breastfeeding, nutrition, immunization, etc. c. Breastfeeding within one hour after delivery

[49] This includes Maternal weight; BP measurement; Oedema; Fundal height; Foetal heartbeat.

[50] Birth preparedness plan is for making the delivery safe. This includes identifying a hospital for the institutional delivery/ caesarean section (if needed); identifying transportation particularly for odd hours; delivering in a facility will incur expenses that is why practice of weekly saving during pregnancy will assist in meeting that expense; and caesarean section may require blood therefore identifying potential blood donor(s) (of the same blood group) and making arrangement for those potential donor(s) to accompany the pregnant women to the health facility will ensure blood if required, seamlessly.

Table 46: Promotive and Preventive Services at the Upazila Health Complex	
	d. Prevention of newborn conjunctivitis e. Special care of pre-term or LBW neonate, including Kangaroo Mother Care f. Weighing, temperature management and cord care g. Screening for congenital problems
4. Expanded Programme on Immunization (EPI)	a. Counselling parents on immunization and adverse effects following immunization (AEFI) b. Reporting and management of AEFI c. Child immunization d. Tetanus Toxoid and Human Papillomavirus (HPV) vaccine for adolescent girls, pregnant women (as applicable) e. Micro-planning for EPI operation f. Requisition and securing vaccines from Civil Surgeon office. g. Maintain cold chain. h. Operate Outreach vaccination site. i. Operate Permanent (daily) vaccination site. j. Ensure vaccine transportation to the outreach sites maintaining cold chain. k. Surveillance of vaccine-preventable diseases
5. Family Planning	a. Family Planning (FP) counselling • Newly married couple • Birth Spacing, methods and adverse effects. b. Advocacy and awareness development on • Postpartum (PP) FP • Post-menstrual regulation (MR) FP • Post-abortion care (PAC) FP c. Screening according to Medical Eligibility Criteria (MEC) for contraceptive use • Pre-Conception FP • Male Condoms • Oral contraceptives • Initiation of depot medroxyprogesterone acetate (DMPA) injection • DMPA injection continuation • Intrauterine devices (IUD) insertion • Postpartum Intrauterine devices (IUD) insertion • Implant placement • Male and female sterilization • Menstrual regulation • Post-abortion care (PAC) FP • Post-partum FP • Post-menstrual regulation (MR) FP d. Management of contraceptive complications
6. Malnutrition Management	a. Growth Monitoring and Promotion (GMP) b. Screening for malnutrition – under nutrition and over-nutrition c. Counselling parents about breastfeeding and best feeding practices d. Iron, Folic Acid, Calcium, Zinc and Micronutrient supplementation e. Promotion of Infant and Young Child Feeding (IYCF) • breastfeeding within an hour of birth • exclusive breastfeeding for 6 months

Table 46: Promotive and Preventive Services at the Upazila Health Complex	
	• breastfeeding until 23 months of age • appropriate complementary feeding
7. **Integrated Management of Childhood Illness (IMCI)**	a. Counselling parents on danger signs, nutrition of the sick child, etc.
8. **Adolescent Health**	a. Counselling on • Puberty • Safe sexual behaviour • Prevention of early marriage • HIV/AIDS • Substance abuse • Family planning • Mental health • Others b. Family Planning service provision c. Adolescent nutrition • Assessment • Supply of IFA d. Adolescent Sexual and Reproductive Health e. Counselling on risk taking behaviour. f. Screening for Sexually Transmitted Infections (STI
9. **Non-Communicable Diseases (NCD)**	a. Screening for Risk Factors of potential diseases • Family History of cardiovascular diseases (CVD) / diabetes mellitus (DM) /kidney disease • High Blood Pressure • High Total Cholesterol • High Blood Sugar • Smoking • Overweight b. Cancer • Counselling on screening of cervical, breast and prostate cancers • Teaching of breast self-examination • Clinical Breast Examination • Screening for cervical cancer (Visual Examination Acetic Acid) c. Mental health • Counselling on identification and support to mental health cases, including fighting stigma and others. d. Medical rehabilitation services • Conduct camps for rehabilitation services
10. **Communicable Diseases**	a. Promote the prevention of communicable diseases such as malaria, dengue, chikungunya, tuberculosis (TB), COVID 19, diarrhoea, hepatitis, scabies, personal hygiene, air-borne diseases, influenza, and others b. Distribution of long-lasting insecticides nets (LLINs) and counselling on their use alongside other repellants c. Prevent HIV/AIDS

Table 46: Promotive and Preventive Services at the Upazila Health Complex	
	d. Malaria (in selected areas) • Distribution of Long-Lasting Insecticidal Bed Nets • Indoor residual spraying e. Kala-azar (in selected areas) • Insecticide indoor residual spraying for Kala-azar f. Sexually transmitted infections (STI) • Prevent and identify. • Screening for Sexually Transmitted Infections (STI)
11. Water-Borne Diseases	a. Counselling on the storage and consumption of safe drinking water (free from pathogens and other substances such as arsenic) b. Identification and symptomatic treatment of arsenicosis due to drinking of arsenic contaminated water.
12. Food-Borne Diseases	a. Counselling on the storage and consumption of fresh food - Avoiding adulterated food, rotten, exposed to flies and dust etc. b. Counselling on avoiding the consumption of junk food and beverages.
13. Social and Behaviour Change Communication (SBCC)	a. Promote health, family planning and nutrition, child survival and safe motherhood. b. Promotion of essential newborn care practice and identification of danger signs for early care seeking c. Awareness on causes, prevention and control of TB and other communicable diseases d. Promote healthy lifestyle for Hypertension and other NCD control. e. Counselling on the consumption of safe water including arsenic contamination. f. Promotion of oral hygiene g. Awareness on child injury and drowning prevention measures h. On malaria prevention and control (in selected districts) i. Awareness on prevention of hearing impairment j. Counselling on smoking cessation k. Health Education related to disability and rehabilitation – promotion of identification of persons with disability and family care taking of the disabled persons. l. To identify, understand and address causes and consequences of gender-based violence (GBV). m. To raise awareness of GBV health services and refer GBV survivors to health facilities.

COMPONENT 2: CURATIVE CARE SERVICES

Curative care services refer to the control of a condition or treatment provided to a patient to resolve an illness, or to promote recovery from an impairment, or injury. The 50 beds in the inpatient department are distributed as male – 15 bed, female – 20 bed and children – 15 bed. Specialized services are available when the consultants are in position.

Table 47: Curative Care Services at the Upazila Health Complex

1. Obstetric Care Management	a. Pregnancy complications. • Anaemia • Malaria • Urinary tract infection • Hypertension • Diabetes • Sexually Transmitted Infections • Dengue • Hepatitis b. Obstetric emergencies which include (isolation or as part of B/CEmONC) • Pre/eclampsia (initial management and referral) • Ante-partum Haemorrhage • Intra-partum Haemorrhage • Abdominal pain • Premature rupture of membranes • Obstructed labour • Pre-term labour including administration of Antenatal Corticosteroids • Management of prolapsed cord • Management of shoulder dystocia • Bi-manual compression to stop uterus atony. • Manual removal of placenta • Removal of retained products. • Repair vaginal and cervical tears, episiotomy • Intravenous fluids, antibiotics, anticonvulsants, oxytocin • Blood transfusion • Caesarean Section and other obstetric operations c. Normal Vaginal Deliveries • Personal and obstetric history • Examination ✓ Foetal position ✓ Foetal heartbeat • Monitor labour progression: Partograph. • Labour induction • Conduct normal delivery. • Controlled cord traction • Episiotomy d. Basic Obstetric and Neonatal Emergencies - BEmONC (all seven services) • Parenteral antibiotics • Parenteral anticonvulsants • Parenteral uterotonics • Manual removal of placenta

Table 47: Curative Care Services at the Upazila Health Complex	
	• Removal or retained products (manual vacuum aspiration) • Assisted vaginal delivery. • Resuscitation of the newborn e. Complete Obstetric & Neonatal Emergencies - CEmONC (all nine services) BEmONC + • Surgical capacity (caesarean section and others) • Blood transfusion f. Other obstetric/gynaecological interventions • Menstrual Regulation (MR) • Dilatation and Curettage (D&C) • Hysterectomy • Others
2. **Postnatal Care (PNC) Management**	a. Postnatal complications • Anaemia • Puerperal psychosis b. Obstetric complications • Haemorrhage • Puerperal infection/sepsis
3. **Newborn Care Management**	a. Pre-term newborn care b. Promotion of essential newborn care practice and newborn danger signs for early care seeking c. Immediate Newbon Care • Clean cord cutting and tying. • Single application of Chlorhexidine 7.1% to the cord • Prevention and management of hypothermia ✓ Drying and wrapping ✓ Skin-to-skin contact ✓ Delayed bathing (after 72 hours) ✓ Kangaroo Mother Care • Identification and management of breathing problems (digital stimulation, bag & mask resuscitation) d. Newborn Care after delivery • Weighing, temperature management and cord care • Identification and management of sepsis • Identification and management of omphalitis • Identification of congenital anomalies e. Breastfeeding within one hour after delivery f. Management of sepsis g. Management of omphalitis h. Management of Low Birth Weight (LBW) babies i. Management of neonatal jaundice j. Management of breastfeeding problems k. Prevention of newborn conjunctivitis l. Management of breathing problems (digital stimulation, bag, and mask resuscitation)
4. **Adolescent Health**	a. Syndromic management of Sexually Transmitted Infections (STI) b. Supply of Iron, Folic Acid (IFA) and other micronutrients
5. **Management of Fever**	a. Simple fever b. Severe febrile disease

Table 47: Curative Care Services at the Upazila Health Complex	
6. Undernutrition Management	a. Moderate acute malnutrition b. Severe acute malnutrition, uncomplicated c. Severe acute malnutrition, complicated d. Anaemia and underlying causes of Anaemia
7. Integrated Management of Childhood Illness (IMCI)	a. Management of diarrhoea[51] b. Management of Acute Respiratory Infection (ARI)[52]
8. Non-Communicable Disease (NCD) Management	a. Hypertension • Diagnosis of hypertension • Management of hypertension b. Diabetes Mellitus (DM) • Diagnosis • Management of Type II DM c. Chronic Obstructive Pulmonary Diseases (COPD) • Diagnosis and management of ambulatory cases • Diagnosis and management of inpatient cases
9. Communicable Disease Management	a. Tuberculosis (TB) • Case detection smear (+) • Chemotherapy including DOTS. • Diagnostic and management of smear (-) • Active case finding in OPD/community. • Preventive therapy of contacts b. Other communicable diseases • Hepatitis diagnosis and management • Typhoid diagnosis and management • Diarrhoea diagnosis and management c. Malaria (in selected districts) • Treatment of uncomplicated malaria - first line • Treatment of uncomplicated malaria – alternative lines d. Kala-azar • DOTS oral treatment • Active case detection among contacts e. Lymphatic Filariasis • Medical management of lymphedema • Surgical treatment of hydrocele • Active case detection among contacts f. Dengue, Chikungunya • Outpatient management • Inpatient management g. Leprosy • Clinical diagnosis • Active case detection among contacts • Multi Drug Therapy (MDT) h. Sexually Transmitted Infections (STI)

[51] no dehydration; mild dehydration; severe dehydration; persistent diarrhoea; dysentery

[52] cough/cold; fast breathing (pneumonia); severe pneumonia; wheeze

Table 47: Curative Care Services at the Upazila Health Complex	
	• Syndromic management
10. Eye Care	a. Treatment of acute conjunctivitis b. Treatment of corneal ulcer c. Detection of cataract and visual impairment d. Surgery • Cataract • Foreign body • Dacryocystorhinostomy (DCR)
11. Skin care	a. Treatment of common skin diseases[53] b. Identify and treat skin conditions due to arsenicosis.
12. Management of Ear, Nose and Throat (ENT) Problems	a. Ear care • Removal of wax and foreign body • Acute ear infection management • Chronic ear infection management • Mastoiditis management • Acute suppurative otitis media management • Management of chronic otitis media b. Throat care • Tonsilitis management • Pharyngitis management c. Surgery • Myringoplasty • Tonsillectomy • Septoplasty • Others
13. Dental Care	a. Treatment of common dental diseases (gingivitis, caries, etc.) b. Tooth extraction c. Filling d. Scaling e. Root Canal Treatment (RCT)
14. Alternative Medical Care	a. Homeopathy/ Ayurvedic/ Unani
15. General Surgery	a. Minor surgeries, • Hernia • Hydrocele • Circumcision • Appendectomy • Others b. Major surgeries • Laparotomy • Cholecystectomy • Others
16. **Cardiology**	a. Rhematic fever management b. Ischemic heart disease (IHD) management c. Myocardial Infarction (Non-STEMI) management d. Heart Failure (Emergency attempt to be provided and referral)

[53] Scabies; Ringworm; Impetigo; Dermatitis; Eczema

Table 47: Curative Care Services at the Upazila Health Complex	
17. Orthopaedics	a. Correction of dislocation b. Fracture management • Open Reduction and Internal Fixation (ORIF) c. Trauma Care
18. Medical Rehabilitation Services	a. Physiotherapy b. Provide services for the disabled persons
19. **Sexual and Gender Based Violence**	a. Case identification b. First-point counselling c. Emergency contraception d. Treatment of minor injuries e. Prophylaxis for Sexually Transmitted Infections (STI) f. Psychological support g. Medic-legal examination
20. Emergency care Management	a. First aid in minor injuries b. Allergic reactions[54] c. Management of drowning d. Stabilization of road traffic-related injuries e. Cardiopulmonary Resuscitation (CPR) f. Poisoning g. Animal bite (snake bite, dog bite, cat bite, fox bite) h. Physical assault i. Trauma care

[54] Bee sting, food allergy, dust allergy, rhinitis, sinusitis

COMPONENT 3: DIAGNOSTIC SERVICES

Diagnostic tests are to support the service provider in providing appropriate treatment. A recommended list of diagnostic services that should be available at a 50 bed Upazila Health Complex in laboratory, radiology, imaging, and blood transfusion units, is provided in Table 48.

Table 48: List of diagnostic services at a Upazila Health Complex

Laboratory services	Radiology and Imaging	Blood Transfusion
Haematology • Haemoglobin • Haematocrit • Platelet count, RBC, WBC • Bleeding and clotting time • Blood grouping and Rhesus (Rh) typing • Blood lipid profile • Blood sugar • Blood urea • Serum electrolyte test • Serum cholesterol Kidney function tests: • Blood urea, • Serum creatinine • Uric acid Liver function tests: • Serum bilirubin • ALT, AST • Alkaline phosphatase Pregnancy test Urine routine microscopic examination (RME) Stool examination (RME) Serological analysis: • RPR/VDRL • HCV • HBsAG • HIV with counselling Cancer screening Microbiological analysis: TB - AFB smear test Malaria[55] - Blood smear/RD antigen test Kala-azar[56] – RDT Dengue[57] - NS1, antibody- IgM IgG COVID-19 test Lab follow-up of hypertension case Histopathology	Digital X-ray Ultrasonography Electrocardiogram (ECG) Echocardiography	Blood transfusion

[55] For selected areas
[56] For selected areas
[57] Lab monitoring of suspected case of Dengue

COMPONENT 4: PHARMACY SERVICES

The pharmacy is a branch of health care that is responsible for supply of safe, and good quality drugs according to the needs of patients. The services are provided in collaboration with the medical officer/consultant and other allied healthcare providers. It consists of selecting, procuring, storing, and dispensing medications, as well as counselling patients on how to use them safely, effectively, and efficiently.

An electronic drug management information system, for ensuring quality of medications, inventory control, storage of medicines, preventing theft, monitoring expiration date, and preventive measures for rodent and pest control needs to be ensured. The pharmacy consists of a pharmacy room in the out-patient department (OPD) and medical storeroom. Different in-patient wards, emergency room, OT and labour room also have mini pharmacies to cater their needs. Basic essential standards for maintaining all the pharmacy spaces are listed in Table 49.

Table 49: Pharmacy Services at a Upazila Health Complex

1. Requisition	a. Average consumption and time required after submitting a requisition are to be considered before placing a requisition
2. Infrastructure	a. Labelling of pharmacy in the OPD. b. Medical storeroom and pharmacy rooms are clean, devoid of dust and dirt. c. A secure outlet to dispense medicine in the pharmacies with proper functional locks to ensure security. d. Dedicated counters and separate queues for men and women in the outpatient department pharmacy e. Shelves for storing medicine: • Protection from the adverse effects of light, dampness, and extreme temp • Free from vermin and insects • Adequate ventilation f. Availability of • Fire extinguisher machine with calibration • Functional refrigerator for storing medicines g. Access to storage restricted only to authorized personnel. h. Medicine arranged on the racks in alphabetical or pharmacological order considering the expiration date.
3. Stock Control and Record Keeping	a. Inventory (register/digital) for Medical and Surgical Requisite (MSR) items • Bin card[58] is in place with updated information. b. A list of available medicines is displayed outside the OPD pharmacy. c. All medicines are available and adequately stocked (ensure availability for at least three months) • An efficient process for inventory control and management to ensure expired drugs are not in stock. d. Medicines are dispensed with effective counselling. e. Medicine stock register updated regularly and maintained. That is name, quantity, date of receipt recorded in the stock register at the time of receipt. • Item description • Unit of issue (mg, mL etc)

[58] printed cards used for accounting for the stock of material, in stores.

Table 49: Pharmacy Services at a Upazila Health Complex	
	• Receipt of date and issue of stock
4. **Effective Stock Rotation and Expiry Monitoring**	a. Follow the First In, First Out (FIFO) principle in conjunction with expiry dates for inventory management b. The expiry dates should be checked at the time of receipt and noted in the stock record register. c. Stock nearing expiry should not be accepted unless it can be used before expiry. d. Medicine expiry dates should be regularly monitored and expired medicine should be immediately segregated and then disposed as per medical waste management protocol. e. Record of drugs expired during the month to be maintained in the register (including date, medicine name, quantity etc.) f. All items are checked for non-moving as well as those items whose expiry date is within 3 months, a list is prepared, segregation is done item wise and supplier wise. g. The medicine near to expiration should be reported to the higher authority.
5. **Demonstration of Good Pharmacy Practices**	a. Maintain requisition slips, registers, storage, dispense with counselling b. Verification of the patient/client before medications are handed over c. Reconfirming the medication, timing, and the dosage amount with the prescription

COMPONENT 5: REFERRAL

The purpose of a structured referral system is to introduce an efficient upward and downward referral system to maximise the utilisation of the Upazila Health Complex and minimise the patient load on higher facilities. A healthcare referral system involved health facilities at various levels is recommended in Figure 6 to ensure that patients in need have access to high-quality medical resources.

The upward referral for patients, denoted by the arrows in green, is composed of two pathways, (1) from the Union Sub-Centre/Rural Dispensaries/Union Health and Family Welfare Centres, and the Community Clinics to the Upazila Health Complex and (2) from **Upazila Health Complex to the District/General hospital**. The downward referral for patients, denoted by the arrows in orange, is divided into two pathways (1) from the **District/General hospital to the Upazila Health Complexes and (2) from the Upazila Health Complexes to the union level health facilities and community clinics.**

Figure 6: Referral pathway from Upazila Health Complex

Effective referral requires clear communication with the referred facility to ensure optimal patient care. The health provider is responsible for updating the referral register and filling out the patient referral form with all necessary information. All referral patients are to be provided with appropriate care. Equal importance should be given to downward referrals.

In case of emergency, the referred patient will be supported with the facility ambulance for transportation to the referred facilities. The ambulance will have a dedicated driver and a SACMO, both trained on basic life-saving skills to accompany the patient(s). Ambulances to be equipped with essential medical equipment and supplies to stabilize patients before they reach a hospital, including oxygen. **Error! Reference source not found.**

provides an indicative list of reasons for referral from a UzHC.

There should be a referral receiving and tracking counter at the UzHC for referred patients/clients, so that they can receive priority treatment and required support upon arrival in the health facility. Digital technology may be used to make it efficient for patients as well as service providers. Reasons for referral from an Upazila Health Complex to a District/General Hospital is given in Table 50.

Table 50: Reasons for patient referral from an Upazila Health Complex	
1. **Antenatal Care**	• HIV/AIDS (counselling and testing) • External version after 36 weeks
2. **Postnatal Care**	Postnatal complications • Excessive bleeding • Anaemia • Puerperal psychosis • Postpartum infection Obstetric complications – • Haemorrhage • Puerperal infection/sepsis • Obstetrics Fistula • Genital prolapse
3. **NCD**	• Complications of Diabetes Mellitus • Cardio-vascular disorders • Mental health conditions
4. **Eye and ENT**	• Cataract and visual impairment • Hearing impairment
5. **Cardiology**	• Myocardial Infarction: ST-elevation myocardial infarction (STEMI) • Congenital and Valvular disease • Heart failure
6. **Others**	• Road traffic-related injuries & trauma care • Burn injuries (acid, electric, scald) • Infertility • Gender based violence cases to One Stop Crisis Centre/Cell (OCC)
Patients to be referred from the Upazila Health Complex to the District/General Hospital • For any of the conditions listed above • If the treatment provided at the UzHC does not improve the patient's condition • For any other condition not mentioned in the list above for which the diagnosis requires further investigation and advanced management	

COMPONENT 6: HUMAN RESOURCES FOR HEALTH

The proposed staffing pattern at a Upazila Health Complex reflects the adequate skill-mix required to deliver the services described in the earlier components of the NHSS. The management of the Upazila Health Complexes in Bangladesh is entrusted to the Upazila Health and Family Planning Officer (UH&FPO), as illustrated in Figure 7. A detailed HR capacity is provided in **Table** 51.

Figure 7: Summary of departments at a Upazila Health Complex

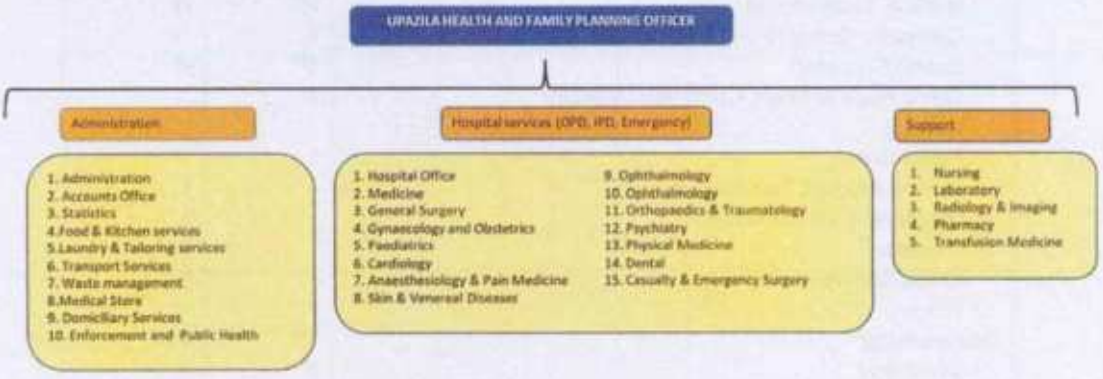


Table 51: Human Resources for Health at a Upazila Health Complex

	Existing	Proposed	Total
Total	128	135	263
Administration	**41**	**5**	**46**
Upazila Health and Family Planning Officer (UH&FPO)	1		
Statistical Officer[59]		1	
Statisticians	1		
Head Assistant cum Accountant	1		
Office Assistant cum Computer Operator	1		
Storekeeper	1		
Cashier	1		
Driver		1[60]	
Office Shayak	1		
Enforcement and Public Health	*2*	*3*	*5*
Medical Officer Public Health		2	
Medical Technologist (Sanitary Inspector)	1		
Medical Technologist EPI		1	
Office Assistant	1		
Domiciliary Services	*32*	*0*	*32*
Health Inspector	2		
Assistant Health Inspector	5		

[59] Statistical Officer at Grade 10

[60] This Driver is proposed for the Vehicle of the UH&FPO

Table 51: Human Resources for Health at a Upazila Health Complex

	Existing	Proposed	Total
Health Assistant[61]	24		
TB/Leprosy Control Assistant	1		
Hospital	87	130	217
Office	*9*	*2*	*11*
Resident Medical Officer[62]	1		
Head Assistant	1		
Medical Technologist	1[63]	-1	
Computer Operator	1		
Health Educator	1[64]	-1	
Office Assistant cum Computer Operator	1		
Cashier	1		
Storekeeper	1		
Electro-medical Technician		1	
Mechanic cum Electrician		1	
Plumber		1	
Office Shayak		1	
Driver	1		
Outsourcing[65]	*26*	*18*	*44*
Ward Boy	6		
Aya	3	6[66]	
Cook	3		
Assistant Cook		1	
Office Assistant	4		
Ticket Clark		3	
Gardener	1	1	
Security Guard	3	5	
Cleaner	6	2[67]	
Outpatient Department	*7*	*13*	*20*
Medical Officer	2	4[68]	
SACMO	1	3	
Health Educator		1[69]	
Support Staff		4	
Dental Surgeon	1		
Medical Technologist (Dental)	1	1	
Medical Officer AMC (Homeopathy/Unani/Ayurvedic)	1		
Compounder	1		

[61] Expected to work part-time at the Community Clinics
[62] To upgrade the post to Grade 6 and provide responsibility to be in-charge of the hospital
[63] Move the Medical Technologist to Pathology under Support Services
[64] Move the Health Educator to OPD
[65] For effective and efficient services outsource staff to be moved to regular revenue budget
[66] Aya of 6 numbers (Labour room 3 for 3 shifts and another 3 for each shift to cover emergency, OT etc.). Existing 3 to cover indoor in 3 shifts.
[67] to cover 3 shifts of outdoor, indoor, and emergency
[68] Increase Medical Officer post by another 4 to cover workload at OPD with quality care.
[69] This health educator post has been transferred from the office to the OPD.

Table 51: Human Resources for Health at a Upazila Health Complex

	Existing	Proposed	Total
Emergency	*3*	*17*	*20*
Assistant Surgeon	1	7[70]	
SACMO		4	
Stretcher Bearer	1	3[71]	
Emergency Attendant	1	3[72]	
Inpatient Department	*35*	*69*	*104*
Consultant[73] Medicine	1		
Consultant General Surgery	1		
Consultant Gynae and Obstetrics	1		
Consultant Paediatrics	1		
Consultant Cardiology	1		
Consultant Anaesthesia	1		
Consultant Skin and Venereal Diseases	1		
Consultant Ophthalmology	1		
Consultant Otolaryngology	1		
Consultant Orthopaedics and Traumatology	1		
Consultant Transfusion Medicine		1	
Consultant Clinical Pathology		1	
Consultant Radiology and Imaging		1	
Consultant Psychiatry		1	
Consultant Physical Medicine		1	
Consultant Dental		1	
Consultant Casualty and Emergency Surgery		1	
Anaesthesiologist	1		
Assistant Surgeon	2	14[74]	
Dietician		1	
Cardiographer	1		
Autoclave Operator		1	
OT Boy	1	1	
Nursing Supervisor	1	2	
Senior Staff Nurse	15	35[75]	
Midwife	4	8	
Support services	*7*	*11*	*18*
Radiologist		1	
Medical Officer (Laboratory Medicine[76])	1		
Medical Officer (Transfusion Medicine)		1	

[70] Emergency department, assistant surgeon posts to increase to 8, to cover 3 shifts with 2 on duty and off after the night shift.
[71] Emergency department, stretcher bearer posts to increase by 3 to cover 3 shifts and off after the night shift.
[72] Emergency department, attendant posts to increase by 3 to cover 3 shifts and off after the night shift.
[73] All the existing Junior Consultants posts are to be re-designated as Consultants and they will provide services in both IPD and OPD. Consultants to provide on-call services any emergencies in the hospital.
[74] To cover 3 shifts duty in the different in-patient departments with day off after night duty
[75] Senior Staff Nurse post need to increase to ensure 3 shifts of 3 wards (male, female, and children) and cabins.
[76] Existing Assistant Surgeon (Pathologist) post to re-designate

Table 51: Human Resources for Health at a Upazila Health Complex			
	Existing	Proposed	Total
Medical Technologist (Radiology)	1		
Medical Technologist (Laboratory)	2[77]		
Medical Technologist (Physiotherapy)	1		
Medical Technologist (Blood Transfusion)		1	
Lab Attendant	1	2	
Senior Pharmacist (Diploma)		1	
Pharmacist	1	1	
Medical waste worker		4[78]	

[77] Including 1 moving from hospital office

[78] For each ward and cabin

COMPONENT 7: MEDICINES

The list of medicines, contraceptives and vaccines provided in Table 52 is recommended and not exhaustive.

Table 52: List of medicine available at the Upazila Health Complex[79]

Anaesthetics and Preoperative Medications	**Diuretics**
Halothane	Frusemide
Nitrous Oxide for Anaesthesia	Thiazides
Oxygen	**Gastrointestinal medicines**
Ketamine	Aluminium Hydroxide Gel with or without Magnesium Trisilicate
Lignocaine with or without Adrenaline	Famotidine
Analgesics, Antipyretics, Non-steroidal Anti-Inflammatory	Omeprazole
Aspirin	Esomeprazole
Paracetamol	Rabeprazole
Pethidine Hydrochloride	Metoclopramide Hydrochloride
Ibuprofen	Sodium Chloride 0.9% with or without Dextrose
Antiallergics and Medicines in Anaphylaxis	**Immunological**
Chlorpheniramine Maleate	Tuberculin, purified protein derivative
Hydrocortisone	Polyvalent Antivenoms
Antidotes and other substances used in Poisoning	Tetanus Toxoid
Activated Charcoal	BCG vaccine
Atropine Injection	DPT vaccine Pentavalent vaccine (DPT, Hepatitis B, Hib)
Anticonvulsants/Antiepileptics	Pneumococcal vaccine (PCV)
Phenobarbitone	Poliomyelitis vaccine (OPV & IPV)
Magnesium Sulphate 50%	MR vaccine (Measles & Rubella)
Anti-infective Medicines	Measles vaccine
Mebendazole	Hepatitis-B vaccine
Albendazole	**Ophthalmological preparations**
Amoxycillin	Gentamycin
Ampicillin	Tetracaine/Amethocaine
Phenoxymethyl Penicillin	**Oxytocic and other obstetrics drugs**
Benzathine Penicillin	Oxytocin
Procaine Penicillin	Misoprostol
Cephalexin	Mifepristone
Cloxacillin	**Medicines for Mental and Behavioural Disorders**
Amoxiclav	Diazepam
Erythromycin	Risperidone
Chloramphenicol	Haloperidol
Doxycycline	Amitriptyline
Co-Trimoxazole	Fluoxetine
Metronidazole	Carbamazepine
Rifampicin with or without Isoniazid	Procyclidine
Rifampicin + Isoniazid + Pyrazinamide with or	

[79] Specialist's use medicines to be secured only if the concerned consultant is available and respective paediatric formulation of medicine need to be made available

Table 52: List of medicine available at the Upazila Health Complex[79]

without Ethambutol	**Medicines acting on the respiratory tract**
Rifampicin + Isoniazid + Ethambutol	Salbutamol
Clotrimazole	Salbutamol inhaler
Nystatin	Steroid inhaler
Artemether with Lumefantrine	Nebulization solution (salbutamol + steroid)
Artesunate	Adrenaline/Epinephrine
Quinine	Theophylline
Primaquine	**Solutions correcting water, electrolyte, and acid-base disturbances**
Chloroquine	Oral Rehydration Salts (ORS)
Antimigraine Medicines	Cholera Fluid
Acetylsalicylic Acid	Dextrose in Water 5%, 25% and 50%
Blood Products and Plasma Substitutes	Glucose
ACD Blood Pack/Double Bag/Triple Bag	Glucose with sodium chloride
Cardiovascular Medicines	Sodium chloride
Aspirin, Clopidogrel	Water for injection (sterile/pyrogen free)
Isosorbide dinitrate	**Vitamins and Minerals**
Digoxin	Ascorbic Acid/Vitamin C
Glyceryl Trinitrate	Vitamin A
Metoprolol	Vitamin B-Complex
Enalapril	Vitamin K
Hydrochlorothiazide	Calcium
Amlodipine	Ferrous Sulphate/Fumarate, with or without Folic Acid
Losartan potassium	Folic Acid
Atorvastatin	Zinc
Injection: Enoxaparin	**Disinfectants and Antiseptics**
Dermatological Medicines (topical)	Chlorhexidine with or without Cetrimide
Miconazole	Chlorhexidine 7.1% for cord application
Potassium permanganate	Povidone-Iodine 10%
Silver Sulfadiazine	**Hormones, other Endocrine Medicines, & Contraceptives**
Gentian Violet	Ethinylestradiol + Levonorgestrel
Neomycin sulphate with Bacitracin	Ethinylestradiol + Lynestrenol
Salicylic Acid + Benzoic Acid	Desogesterol + Ethinylestradiol
Benzyl Benzoate	Levonorgestrel
Diagnostic Agents	Depot Medroxyprogesterone
Fluorescein	Copper-T containing device
Ear, Nose and Throat conditions in Children	Male Condoms
Ciprofloxacin	Levonorgestrel-releasing implant
Gentamicin + Hydrocortisone	Insulin, short acting
	Metformin Hydrochloride

COMPONENT 8: EQUIPMENT

To ensure optimal utilization and safety of the equipment, the following should be ensured:

1. Records of equipment are kept including procurement, equipment defects and failures, maintenance, repair, and disposal.
2. Staff allowed to operate equipment or machinery are appropriately trained and re-trained and no untrained person operates the equipment.
3. Safeguards for electronic equipment are used such as: - Voltage stabilizer - Automatic switch over for emergency (generator)

Quantity of the equipment and other logistics is not mentioned as it will vary in different Upazila Health Complexes, depending on the number and types of service providers and patient/client loads, both of which are inter-dependent. The list of the equipment at a Upazila Health Complex is listed in Table 53.

Table 53: List of Equipment at the Upazila Health Complex

Basic medical equipment	Obstetrics squatting chair
Stethoscope	Birthing ball
BP machine	Labour Table
Adult scale	Radiant warmer
Torches	Normal delivery set with trolley[80]
Watch	Neonatal resuscitation set with trolley[81]
ARI timer	Post Partum Haemorrhage (PPH) set tray
Height measuring board	Eclampsia set tray
Measuring tape (for MUAC)	Measuring scale for newborn
Thermometer	**Paediatrics**
Glucometer	Phototherapy unit
Infection Control	Paediatric (Salter) scale
Autoclave	Growth Monitoring Chart
Sterilizer machine	Ishihara chart
General Surgery equipment/instruments	**Medical Rehabilitation**
OT light	Shoulder Wheel
OT Table Hydraulic	Exercise Bicycle
Suction machine electric	Gait Training Apparatus
Anaesthesia machine	Infrared Lamp
Cardiac Monitor	**Laboratory**
Pulse Oximeter	Microscope
Gas Cylinders (O_2) (backup)	Sputum, blood specimen bottles and others for
Gas cylinder (N_2O)	sample collection and test
Suture dressing set (forceps, scissors etc.)	Electric/Hand crank centrifuge
Universal eye speculum	Analyzer
Plane scissors	**Radiology and Imaging**
Spring scissors	ECG Machine
Anterior Chamber (AC) Canula	Ultrasonogram
15 degree side port	Digital X-Ray machine with Auto-processor
2.4mm knife	Echocardiogram machine

[80] sheets, aprons, blades, thread etc.
[81] Ambu bag with baby mask, laryngoscope, ETT, penguin sucker etc.

Table 53: List of Equipment at the Upazila Health Complex	
Viscoelastic gel	**Blood Transfusion Unit**[82]
Chopper	Blood transfusion bed
Dialer	Blood transfusion set with bag
Ciniski	Refrigerator
Saint Martin forceps	**Medical store**
Mac forceps	Refrigerator
Punctum dilator	Almirah and rack
Prob	Chair and table
6/0 Vicryl Suture	Wall Clock
10/0 monofilaments	**Dental**
DCR tube	Dental Chair Unit (with light, spittoon, suction, air-water syringe, and delivery system)
Bone punch	
Trephine blue	Portable Suction Unit (if not integrated into the chair)
Periosteum	
Osteotome	Dental Light (ceiling or wall-mounted for precision)
Hammer	
Chisel	Diagnostic Instruments (mouth mirrors, probes, tweezers, Cotton pliers)
Jimmy retractor	
Bone holder	Extraction Instruments (forceps, elevators)
AO clamp/bone holder	Restorative/Filling Instruments (amalgam carriers, condensers, Burnishers, carvers, composite instruments)
Electric drill, drill bit	
Plates and screw (variable size)	
K wire, surgical wire	Scaling Instruments (scalers, curettes)
Screwdriver	Endodontic Instruments (files, spreaders, pluggers)
Bone cutter	
Caesarean section set	Surgical Instruments (blades, hemostats , suturing materials)
Laryngoscopes	
Proctoscope	Root Canal Instruments (Hand files- K-files, H-files, Barbed broaches, Endodontic syringe with needles, Rubber dam kit)
Laparotomy surgical instrumental set	
Hysterectomy set	
Diathermy machine	Restorative Materials (Amalgam, Composite resin, Glass ionomer cement)
Eye and ENT Surgery	
Microscope	Root Canal Materials (Gutta-percha points, Root canal sealers)
Diagnostic set or otoscope	
Hearing screening equipment	General Consumables (Cotton rolls, gauze, and sponges, Local anesthetics (cartridges and syringes), Disinfectants and cleaning agents)
Vision testing chart (snail chart)	
Obstetrics and Gynae (Labour room & OT)	
Partograph	Autoclave for sterilizing instruments.
Obstetrics forceps	Ultrasonic Cleaner for cleaning tools.
Foetal Doppler	Personal Protective Equipment (PPE): gloves, masks, aprons.
Specula	
Manual Vacuum Aspiration Set	Operator Stool (adjustable and ergonomic).
Obstetrics Vacuum Machine (Ventose)	

[82] Chair, refrigerator, blood tube sealer, blood transfusion set.

COMPONENT 9: OTHER LOGISTICS

List of logistics at the Upazila Health Complex is given in Table 54.

Table 54: List of Logistics at the Upazila Health Complex

Furniture	**Infection Prevention**
Patient Examination Table	Soap
Patient Beds (fowler bed) with Bedside Lockers	Sanitizer
Tables	Running water
Dispensing tables	Disinfectant
Chairs	Detergent
wheelchair	Hand gloves
Stool	Buckets, bowls, mugs, brushes, brooms, dusters & others
Benches with Back Rest	Toilet cleaner
Electric Fans	Phenyl
Air-Conditioners	Sterilizer
Racks	Autoclave
Almirah	Needle crusher
Stretchers	Surgical masks and caps
Drip stand	Eye protector
Patient Trolley	Apron
Food trolley	**Consumables**
Medicine trolley	Syringes and needles
Trolley for instruments.	Gauze
Multiple registers	
Growth Monitoring Chart	Bandage
Facility infrastructure	Latex gloves or Hand gloves
Generators/Solar panel	Strips for RDT
Deep tube well with electric motor	Cotton Wool
Sanitation sewage system	Laboratory reagents
Central oxygen system	X-ray films
Air conditioners	Blood Bags
Electric fans and lights	**Safety**
Medical Waste Management	Firefighting equipment (extinguisher, blanket etc.)
Black Bin	CCTV cameras
Yellow Bin	**Vehicles**
Red Bin	Ambulance
Green Bin	Vehicle for UH&FPO
Blue bin	**Others**
Bowl (Blue)	Biometric machine for attendance
Biohazard bags	
Waste bags	
Spade and other digging tools[83]	
Waste Carrying Trolly	
Heavy duty gloves	
PPE Equipment	

[83] For waste pit

COMPONENT 10: DIGITALIZATION & INFORMATION TECHNOLOGY

The Upazila Health Complex to be fully digitalized in its operation, correspondence with higher authorities and report transmission. As an integral part of the digitization process, all patients/clients seeking health service will be assigned a permanent patient ID number (PID). These PIDs will be derived from the patient/client's birth registration number[84] or the National identification number (NID)[85], contingent upon their age. The PIDs will be utilised to monitor previous records upon the patient/client's visit to the UzHC, allowing service providers to examine the patient's medical history. Additionally, these PIDs to be valid at all other government health facilities. The electronic transmission of patient/client data to the current DGHS platform should occur on a regular basis. Digitalization will also be incorporated into the referral process of patients between public health facilities and at the pharmacies through the electronic drug management information system.

The Local Area Network (LAN) to be used to connect different service providers such as the consulting physician, pharmacist, laboratory technologist, midwife, to electronically transmit information of attending patient/client.

To operationalise the digitisation the following logistics and equipment to be available:

1. Laptop/desktop computer
2. Printers
3. Dedicated Broadband Internet Connectivity
4. Local Area Network (LAN)
5. Video conferencing tools
6. Web-based app for patient registration and Electronic Medical Record

[84] for under 18 years

[85] for 18 years and above

COMPONENT 11: PHYSICAL INFRASTRUCTURE

The additional staff proposed by the NHSS will require additional space at the Upazila Health Complex. Therefore, the standards suggest a redesign of the Upazila Health Complex to incorporate the requirements listed in **Table 55**.

Table 55: Infrastructure Standards at the Upazila Health Complex

1. Display and signage	a. Facility signboards and opening hours displayed at the facility entrance(s) in Bangla b. Adequate and clear signage to be displayed on the main and connecting roads to the facility. c. Citizen charter is displayed at the UzHC entrance in Bangla. d. List of available medicine is displayed and updated daily e. Safety, hazard, and caution signs prominently displayed at relevant places. f. Important information such as contact numbers (e.g., fire, police, ambulance, and referral centres) clearly displayed g. The services to be provided, cleaning schedule, monthly performance chart and relevant behaviour change communication (BCC) messages should be clearly displayed in the rooms
2. Maintenance	a. Facility premises to be well maintained and free from • Garbage • Commercial banners, posters, and paintings • Non-functioning equipment • Unauthorised establishments b. The facility building is neat and clean. Staff follow written policies and procedures and schedules for: • Disinfection and cleaning of all equipment, furniture, floors, walls, storage areas and other surfaces and areas • Cleaning of specialized areas, e.g., OT, Labour Room, Emergency Ward, etc
3. Usability	a. The facility building should be user friendly for all, including the disable. • Functional wheelchairs, patient trolleys and stretchers are available at the gate/reception for patients who are unable to walk. • All patient areas of the hospital are easily accessible by wheelchair. • Multi-story buildings have ramps or functional lifts with an operator. b. Corridors, storage areas, passageways and stairways are well lit. c. There are always clear pathways to and from exits. d. Room arrangement following patients' pathways. e. Floor surfaces are non-slip and even.
4. Rooms	a. Multiple ticket counters[80] b. Independent consultation rooms in the outpatient department (OPD) c. Waiting area for clients/patients and attendants • There are designated separate male and female waiting areas d. Breast feeding corner e. Emergency room with proper access • Observation room with bed

[80] Separate ticket counters for male, female.

Table 55: Infrastructure Standards at the Upazila Health Complex	
	f. Labour room with attached bathroom and running water supply g. Operation Theatres h. Laboratory • The laboratory is well lit and ventilated. • Storage facilities for specimens and reagents are sufficient to enable staff easy access. • Inspection and maintenance schedules are completed and used for all laboratory equipment. i. Radiology and Imaging room with protection from radiation • All equipment is subject to tests on installation to ensure the equipment meets with contract specifications and confirms mechanical, electrical and radiation safety. • Radiology equipment is stable, functioning and installed only in radiation protected rooms in accordance with Nuclear Safety and Radiation Control Rules 1997. j. General Store k. Medicine store is separated from General Store l. Toilets: Male, female, and disabled segregated toilets with running water supply for outpatient and inpatient departments m. Multiple handwashing facilities with availability of running water, liquid soap and/or sanitizer. Some for the service providers fitted inside a consultation room and the others for the service recipient fitted in the waiting lobby.
5. Utilities	a. Electricity: supply connection with back-up generator or solar for the entire facility b. Water: Running water supply with provision of safe drinking water • A supply line and storage system keep water clean and free from contamination. c. Sanitation: drainage system should be cleaned and maintained d. Central oxygen supply e. Fire Safety: fire extinguishers and fire hoses are easily visible and accessible in strategic areas.

COMPONENT 12: INFECTION PREVENTION & CONTROL INCLUDING MEDICAL WASTE MANAGEMENT

Infection prevention and medical waste management (MWM) is paramount in health care facilities as it protects both patients and healthcare workers from diseases. Without controlling the spread of infection, hospitals would become unsafe to go to or visit and operate.

Table 56: Infection prevention and MWM measures at the Upazila Health Complex

Infection Prevention & Control	
1. Cleanliness	a. The facility, equipment and supplies are kept clean and safe for clients/patients, visitors/attendants, and staff. b. Facility premises are free from litter and other refuse. c. Equipment, floors, and walls are free from body fluids, dust, spit, and grit. • Disinfectant and detergent should be used for cleaning the floor and wall as applicable. • Cleanliness shall always be maintained by washing and mopping with disinfectants. • Toilets should be cleaned using disinfectant and detergent as applicable. d. OT fumigation periodically and as necessary
2. Hygiene	a. Availability of running water supply, soap, alcohol-based hand disinfectant b. Regular handwashing with soap and/or use of sanitizers
3. Guidelines	a. Guidelines for standard hand washing and infection prevention procedures should be displayed
4. Protective Equipment	a. Availability of face mask, hand gloves b. Regular use of face mask and hand gloves by the service providers
5. Disposal	a. Safe final disposal of medical waste in accordance with the Medical Waste (Management and Processes) Rules 2008 b. Use of auto disposable syringes and needles and disposing them appropriately with medical waste
Medical Waste Management	
1. Guidelines	a. The Upazila Health Complex should have a documented waste disposal strategy specifying protocols, responsibilities, a schedule for waste collection, and list of necessary equipment (e.g., waste bins and bags). b. A clear guide for waste segregation and storage to be visibly posted in area(s) where medical waste is generated. • This should include waste segregation in clearly labelled coded bins in accordance with the Medical Waste (Management and Processes) Rules 2008. • IEC materials promoting awareness campaign on medical waste management to be displayed at the facilities for both service providers and recipients
2. Capacity building	a. Periodic capacity building needed for staff handling infectious waste on hazards of waste, management of waste and infection control.
3. Maintenance and logistics	a. All waste must be protected from theft, vandalism or scavenging by persons or animals. b. Waste to be segregated at its origin. c. Different color-coded bins to be available in sufficient numbers.

	d. Medical waste should be correctly and appropriately disposed of as per the protocol (details in Table 57)

Table 57: Medical waste management protocol

Segregation of wastes at source of origin into:	Coloured bins:	Disposing off method
1. Non-hazardous/infectious, general waste	Black	Burn and/or Burry (in a separate pit[87] than the infectious, hazardous one)
2. Non-hazardous with recycled items	Green	Recycle
3. Hazardous, Infectious waste	Yellow	Burn and/or bury (in a pre-prepared pit[88])
4. Hazardous, Sharp waste	Red	Bury in a separate pit[89]
5. Hazardous, Infectious liquid waste	Blue	Add disinfectant and keep it for 30 minutes and then throw it down the drain.

[87] Floor of the waste pit should not be covered with concrete or any other means.
[88] Floor of the waste pit should not be covered with concrete or any other means.
[89] Floor of the waste pit should not be covered with concrete or any other means.

COMPONENT 13: MANAGEMENT

The Upazila Health and Family Planning Officer (UH&FPO) is the facility head at the Upazila Health Complex (UzHC) under the supervision of the civil surgeon who oversees the district health system. The UH&FPO is responsible for the overall management and supervision of the UzHC, including administrative management, human resource management, service delivery management, and community engagement.

An upazila health complex based Health Committee known as Upazila Hospital Management Committee (UHCM) is an advisory body that was formed following a circular from the Hospital-2 Section of the MOHFW issued on 05-04-2009 substituting the same memo and date (Memo-Hosp-2 / Inspection Committee-1 / 2007 / 193) (RTM, 2012). This is a 21 member committee and the local Member of the Parliament is the Chair of this committee. The other members of the committees are Upazila Chairman, Vice Chairman, Upazila Nirbahi Officer (UNO), Upazila Health and Family Planning Officer, Resident Medical Officer (RMO), local male, female elites, upazila Officer in charge (OC) of the Police Station.

Table 58: Management of the Upazila Health Complex	
1.	Upazila Health Complex is managed by the Upazila Health and Family Planning Officer (UH&FPO).
2.	The Member of the Parliament chairs the Upazila Hospital Management Committee (UHCM)
3.	Civil Surgeon is the supervisor for the UzHC
4.	The UzHC is funded by the DGHS for all HR support, funds for MSR Medical Surgical Requisite (MSR), equipment, and other logistics and finance needs.
5.	Maintenance of Client/Patient and other Registers as mandated by the DGHS
6.	Grievance Redress Mechanism[90]
7.	Signage informing the operating hours and days
8.	Availability of latest Job Description of all the staff
9.	Available standard treatment protocols (for identified cases) to be followed strictly
10.	Biometric machine for attendance is easily accessible and functional. • Time and date are updated. • Uninterrupted electric power available • All staff are registered. • Print out is available on spot
11.	Display board with information on available medicine list to be present.

[90] A Grievance redressal system allows individuals (in this case - patients, clients, attendants, visitors of a health facility) to voice their complaints and concerns (could be regarding the services and/or service provider/other staff) to the respective authorities who in turn respond by redressing, where possible, otherwise informing the situation. For service delivery facilities this is an indication of governance demonstrating accountability to the citizens. There are many grievance redressal systems in place, such as the 16263 call centre number at DGHS or the establishment of a complaint box that is periodically opened after which the complaint receipt and response from the authority are publicly displayed.

COMPONENT 14: HEALTH AND SAFETY

This component is designated to protect the health and safety of clients/patients, staffs and visitors and allow the service delivery to be safe, accessible and respect clients'/patients' need for privacy.

Table 59: Health and Safety standards at a Upazila Health Complex	
1. **Policies**	a. Health and safety policies, procedures and standard protocols are available, displayed and followed by staff to: • Prevent contamination incidents related to health care waste. • Follow a sharps and needle-stick injuries (NSI) reporting system, with proper segregation and disposal of sharps. • Provide basic life support
2. **Vaccination**	a. Ensure appropriate vaccination for the staff of the UzHC
3. **Fire Safety**	a. Availability of firefighting equipment (fire extinguisher, and fire blanket) b. Trained staff who conduct periodic mock drills.
4. **Storage**	a. Chemicals, medicine, and equipment are stored safely, as per protocols
5. **Protective Equipment**	a. Staff are provided with and use protective equipment, e.g., gloves, aprons, masks for safe handling of hazardous material.
6. **Surveillance Camera (CCTV) Systems**	a. Surveillance camera (CCTV) systems installed both inside and outside the facility to ensure: • the safety and security of service providers, and patients, and • prevent the theft of medicine and equipment. b. Recording should be preserved for a minimum of one year.

Bangladesh National Health Services Standards

Volume 3:
District / General Hospital

To ensure effective delivery of essential health services package: Towards Universal Health Coverage through supporting Primary Health Care approach in Bangladesh

VOLUME 3: NHSS FOR DISTRICT/ GENERAL HOSPITAL

There are 60 District/General Hospitals with varying bed capacities: six with 100 beds, 53 with 250 beds, and one with 300 beds (DGHS, 2024). Usually when a district hospital has 250 beds, it is turned into a medical college hospital. Since NHSS for medical college hospitals is developed separately, and most of the district/general hospitals are 250 bedded, hence, 250 bed is proposed as standard for district/general hospital. District hospitals provide care services through the (1) Out-patient department (OPD), (2) In-patient department (IPD), (3) Emergency department, and (4) Support services. A recommended list of the services offered by each department is presented in Table 60. A recommended list of 250 bed distribution in the in-patient department is provided in Table 61.

Table 60: List of broad services available at a District/General Hospital

Out-patient department[91]	In-patient department [92]	Emergency department	Support services
1. Medicine 2. General Surgery 3. Gynae & Obstetrics 4. Paediatrics 5. Cardiology 6. Orthopaedics 7. Otolaryngology 8. Ophthalmology 9. Nephrology 10. Urology 11. Neurology 12. Dermatology 13. Oncology 14. Forensic Medicine 15. Psychiatry 16. Dentistry 17. Homeopathy, Unani & Ayurvedic	1. Medicine 2. General Surgery 3. Gynae & Obstetrics 4. Paediatrics 5. Cardiology & CCU 6. Orthopaedics & Traumatology 7. Otolaryngology 8. Ophthalmology 9. Nephrology 10. Neurology 11. Critical Care Medicine 12. Medical Oncology 13. Clinical Nutrition	Emergency and Casualty Surgery	1. Laboratory 2. Radiology & Imaging 3. Transfusion Medicine 4. Physical Medicine 5. Anaesthesia & Pain Medicine 6. Operation Theatre 7. Nursing

Table 61: Bed distribution of a 250 bedded District/General Hospital

Department	Beds	Department	Beds
Medicine	35	Ophthalmology	10
General Surgery	35	Nephrology	10
Gynaecology & Obstetric	35	Neurology	10
Paediatrics	25	Emergency & Casualty	10
Cardiology & CCU	25	Critical Care Medicine	10
Orthopaedics and Traumatology	25	Medical Oncology	5
Otolaryngology	10	Clinical Nutrition	5
Total beds			**250**

[91] Subject to availability of concerned consultants
[92] ibid

COMPONENT 1: PROMOTIVE AND PREVENTIVE SERVICES

All the healthcare providers in the district/ general hospitals to use all interactions with the patients and their attendants to promote promotive and preventive services. Hospital OPD and other places (in front of laboratory, radiology department, and dispensaries) where patients or their attendants wait need to have provision of audio-visual equipment to display promotive and prevention messages on various issues/topics.

Table 62: Promotive and Preventive Services at the District/General Hospital

1. Antenatal care (ANC)	a. Clinical history b. Diagnosis of Pregnancy c. Obstetric and foetal assessment[93] d. Information and counselling on nutrition, pregnancy complications, post-partum FP, breastfeeding e. Investigations • Hb estimation • Blood grouping and Rh typing • Testing for syphilis • HIV/AIDS (counselling and testing) • Blood sugar • Ultrasonogram f. Supply of Iron, Folic Acid (IFA), Zinc and other micronutrients g. Birth Preparedness Plan[94] • Identification of referral hospital • Identification of transportation means. • Setting aside money (weekly saving) • Identification of blood donor h. Identify and manage moderate anaemia.
2. Postnatal care (PNC)	a. Clinical history (pain, fever, haemorrhage, convulsion etc.) b. Counselling on postnatal care, breastfeeding, nutrition, immunization, etc. c. Counselling on post-partum eclampsia d. Counselling of postnatal complications • Anaemia • Puerperal sepsis • Postpartum psychosis e. Counselling and Provision of family planning methods f. Supply of Iron, Folic Acid, Zinc, and other micronutrients g. Post-partum Vitamin A supplementation
3. Newborn Care	a. Promotion of essential newborn care practice and newborn danger signs for early care seeking b. Counselling about breastfeeding, nutrition, immunization, etc. c. Breastfeeding within one hour after delivery

[93] This includes Maternal weight; BP measurement; Oedema; Fundal height; Foetal heartbeat.

[94] Birth preparedness plan is for making the delivery safe. This includes identifying a hospital for the institutional delivery/ caesarean section (if needed); identifying transportation particularly for odd hours; delivering in a facility will incur expenses that is why practice of weekly saving during pregnancy will assist in meeting that expense; and caesarean section may require blood therefore identifying potential blood donor(s) (of the same blood group) and making arrangement for those potential donor(s) to accompany the pregnant women to the health facility will ensure blood if required, seamlessly.

Table 62: Promotive and Preventive Services at the District/General Hospital	
	d. Prevention of newborn conjunctivitis e. Special care of pre-term or low-birth weight (LBW) neonate, including Kangaroo Mother Care f. Weighing, temperature management and cord care g. Screening for congenital problems
4. Expanded Programme on Immunization (EPI)	a. Counselling parents on immunization and adverse effect (AEFI) b. Reporting and management of AEFI c. Child vaccination d. Tetanus Toxoid and Human Papillomavirus (HPV) vaccine for adolescent girls, pregnant women (as applicable) e. Vaccination site f. Surveillance of vaccine-preventable diseases
5. Family Planning	a. Family Planning Counselling • Newly married couple • Birth Spacing, methods and adverse effects. b. Advocacy and awareness building on • Post-partum (PP) FP • Post-menstrual regulation (MR) FP • Post-abortion care (PAC) FP c. Screening according to Medical Eligibility Criteria (MEC) for contraceptive use • Pre-Conception FP • Male Condoms • Oral contraceptives • Initiation of depot medroxyprogesterone acetate (DMPA) injection • DMPA injection continuation • Intrauterine devices (IUD) insertion • Postpartum Intrauterine devices (IUD) insertion • Implant placement • Male and female sterilization • Menstrual regulation • Post-abortion Care (PAC) FP • Post-partum FP • Post- menstrual regulation FP d. Management of contraceptive complications
6. Under-nutrition management	a. Growth Monitoring and Promotion (GMP) b. Screening for malnutrition (under-nutrition and over-nutrition) c. Counselling parents about breastfeeding and best feeding practices d. Iron, Folic Acid, Calcium, Zinc and Micronutrient supplementation e. Promotion of Infant and Young Child Feeding (IYCF): • breastfeeding within an hour of birth • exclusive breastfeeding for 6 months • breastfeeding until 23 months of age • appropriate complementary feeding
7. Integrated Management of Childhood Illness (IMCI)	a. Counselling parents on danger signs, nutrition of the sick child, etc.
	a. Counselling on

Table 62: Promotive and Preventive Services at the District/General Hospital	
8. Adolescent Health	• Puberty • Safe sexual behaviour • Prevention of early marriage • HIV/AIDS • Substance abuse • Family planning • Mental health • Others b. Family Planning service provision c. Adolescent nutrition • Assessment • Supply of iron folic acid (IFA) d. Adolescent Sexual and Reproductive Health e. Counselling on risk taking behaviour. f. Screening for Sexually Transmitted Infections (STI)
9. Non-Communicable Diseases (NCD)	a. Screening for Risk Factors • Family History of cardiovascular diseases (CVD) / diabetes mellitus (DM) /hypertension/kidney disease/liver disease • High Blood Pressure • High Total Cholesterol • High Blood Sugar • Smoking • Overweight b. Cancer • Counselling on screening of cervical and breast cancers • Teaching of breast self-examination • Clinical Breast Examination • Screening for cervical cancer (Visual Examination Acetic Acid) • Screening for oral cavity cancer • Screening for upper and lower GIT cancer • Screening for prostate cancer c. Mental Health • Counselling on identification and support to mental health cases, including fighting stigma and others.
10. Communicable Diseases	a. Promote the prevention of communicable diseases such as malaria, dengue, chikungunya, tuberculosis (TB), COVID 19, diarrhoea, hepatitis, scabies, personal hygiene, air-borne diseases, influenza, and others b. Prevent HIV/AIDS c. Malaria (in selected areas) • Distribution of Long-Lasting Insecticidal Nets • Indoor residual spraying d. Kala-azar (in selected areas) • Insecticide indoor residual spraying for Kala-azar (in selected areas) e. Sexually transmitted infections (STI) • Prevent and identify. • Promote for screening of STI.
11. Water-Borne Diseases	a. Counselling on the storage and consumption of safe drinking water (free from pathogens and other substances such as arsenic)

Table 62: Promotive and Preventive Services at the District/General Hospital	
	b. Identification and symptomatic treatment of arsenicosis due to drinking of arsenic contaminated water.
12. Food-Borne Diseases	a. Counselling on storage and consumption of fresh food - avoiding adulterated food, rotten, exposed to flies and dust etc. b. Counselling on avoiding the consumption of junk food and beverages.
13. Social and Behaviour Change Communication (SBCC)	a. Promote health, family planning and nutrition, child survival and safe motherhood. b. Promotion of essential new-born care practice and identification of danger signs for early care seeking c. Awareness on causes, prevention and control of TB and other communicable diseases d. Promote healthy lifestyle for Hypertension and other (NCD) control. e. Counselling on the consumption of safe water and arsenic contamination. f. Promotion of oral hygiene g. Awareness on child injury and drowning prevention measures h. On malaria prevention and control (in selected districts) i. Awareness on prevention of hearing impairment j. Counselling on smoking cessation

COMPONENT 2: CURATIVE CARE SERVICES[95]

Curative care services refer to the control of a condition or treatment provided to a patient to resolve an illness, or to promote recovery from an impairment, or injury.

Table 63: Curative Care Services at the District/General Hospital	
2. Obstetric care management	a. Pregnancy complications. • Anaemia • Malaria • Urinary tract infection • Hypertension • Diabetes • Sexually Transmitted Infections • Dengue • Hepatitis b. Obstetric emergencies which include (in isolation or as part of Basic/Comprehensive Emergency Obstetrical and Newborn Care - B/CEmONC) • Pre/eclampsia • Ante-partum Haemorrhage • Haemorrhage • Abdominal pain • Premature rupture of membrane • Obstructed labour • Pre-term labour, including administration of Antenatal Corticosteroid • Management of prolapsed cord • Management of shoulder dystocia • Bi-manual compression to stop uterus atony. • Manual removal of placenta • Removal of retained products. • Repair vaginal and cervical tears, episiotomy • Intravenous fluids, antibiotics, anticonvulsants, oxytocin • Blood transfusion • Caesarean Section and other obstetric operations c. External version after 36 weeks d. Normal Vaginal Delivery • Personal and obstetric history • Examination o Foetal position o Foetal heartbeat • Monitor labour progression: Partograph. • Labour induction • Conduct normal delivery. • Controlled cord traction • Episiotomy

[95] Some of the services mentioned may only be provided if the concerned Consultant is available.

Table 63: Curative Care Services at the District/General Hospital	
	e. Basic Obstetric & Neonatal Emergencies (all 7 services) i. Parenteral antibiotics ii. Parenteral anticonvulsants iii. Parenteral uterotonics iv. Manual removal of placenta v. Removal or retained products (manual vacuum aspiration) vi. Assisted vaginal delivery. vii. Resuscitation of the newborn f. Comprehensive Obstetric and Neonatal Emergencies (all 9 services) BEmONC + viii. Surgical capacity (caesarean section and others) ix. Blood transfusion g. Other obstetric/gynae interventions • Menstrual Regulation (MR) • Dilatation and Curettage (D&C) • Hysterectomy • Repair of Perineal Tear • Repair of Vesicovaginal Fistula (VVF) • Others
3. **Postnatal Care (PNC) management.**	a. Postnatal complications • Anaemia • Puerperal psychosis b. Obstetric complications • Haemorrhage • Puerperal infection/sepsis c. Early management of Obstetric Fistula d. Genital prolapse.
4. **Newborn Care management**	a. Pre-term newborn care b. Promotion of essential newborn care practice and newborn danger signs for early care seeking c. Immediate newborn care • Clean cord cutting and tying. • Single application of Chlorhexidine 7.1% to the cord • Prevention and management of hypothermia ✓ Drying and wrapping ✓ Skin-to-skin contact ✓ Delayed bathing (after 72 hours) ✓ Kangaroo Mother Care (KMC) • Identification and management of breathing problems (digital stimulation, bag & mask resuscitation) d. Newborn Care after delivery • Weighing, temperature management and cord care • Identification and management of sepsis • Identification and management of omphalitis • Identification of congenital anomalies e. Breastfeeding within one hour after delivery

Table 63: Curative Care Services at the District/General Hospital	
	f. Management of sepsis g. Management of omphalitis h. Management of Low birth weight (LBW) babies i. Management of neonatal jaundice j. Management of breastfeeding problems k. Prevention of newborn conjunctivitis l. Management of breathing problems (digital stimulation, bag, and mask resuscitation)
5. **Adolescent health**	a. Syndromic management of Sexually Transmitted Infections (STI) b. Etiologic management of STI c. Supply of Iron, Folic Acid (IFA) and other micronutrients
6. **Management of fever**	a. Simple fever b. Severe febrile disease
7. **Under-nutrition Management**	a. Moderate acute malnutrition b. Severe acute malnutrition, uncomplicated c. Severe acute malnutrition, complicated d. Anaemia and underlying causes of anaemia
8. **Integrated Management of Childhood Illness (IMCI)**	a. Management of Diarrhoea b. Management of Acute Respiratory Tract Infection (ARI) c. Integrated Management of Childhood Illness (IMCI)
9. **Non-Communicable disease management**	a. Hypertension • Diagnosis of Hypertension • Management of Hypertension • Lab follow-up of Hypertension cases b. Diabetes Mellitus (DM) • Diagnosis of DM • Management of Type II DM • Management of Type I DM c. Chronic Obstructive Pulmonary Diseases (COPD) • Diagnosis and management of ambulatory cases • Diagnosis and management of inpatient cases d. Stroke management
10. **Communicable disease management**	a. HIV/AIDS (selected areas and/or population group) • HIV Testing and Counselling (HTC) • Prevention of Mother-to-Child Transmission (PMTCT) of HIV • Anti-Retroviral Treatment (ART) • Prevention and treatment of Opportunistic Infections • Lab diagnosis and follow up of ART. b. Sexually Transmitted Infections (STI) • Syndromic management • Etiologic management c. Tuberculosis (TB) • Case detection Smear (+) • Chemotherapy including DOTS. • Diagnostic and management of Smear (-)

Table 63: Curative Care Services at the District/General Hospital	
	• Active case finding in OPD. • Preventive therapy of contacts d. Other Communicable Diseases • Hepatitis: diagnosis and management • Typhoid: diagnosis and management • Diarrhoea and dysentery: diagnosis and management o Helminth diseases: diagnosis and management • Lower and Upper Respiratory Tract Infection: diagnosis and management e. Malaria (in selected areas) • Diagnostic of malaria: Rapid Diagnostic Test (RDT) and Laboratory • Treatment of uncomplicated malaria – first line • Treatment of uncomplicated malaria – alternative lines • Management of severe/complicated malaria f. Kala-azar • DOTS oral treatment g. Lymphatic Filariasis • Clinical diagnosis • Management of acute attacks • Medical management of lymphedema Surgical treatment of hydrocele h. Dengue • Outpatient management • Inpatient management i. Leprosy • Clinical diagnoses • Multi Drug Therapy (MDT)
11. Eye Care	a. Treatment of acute conjunctivitis b. Treatment of corneal ulcer c. Detection of cataract and visual impairment d. Management of cataract and visual impairment e. Surgery • Cataract • Foreign body removal • Dacryocystorhinostomy (DCR)
12. Skin care	a. Treatment of common skin diseases b. Identify and treat skin conditions for arsenicosis.
13. Management of Ear, Nose and Throat (ENT) problems	a. Ear care • Removal of wax and foreign body • Ear infection (acute and chronic) • Mastoiditis • Management of acute suppurative otitis media • Management of chronic otitis media • Identification and management of hearing impairment b. Nose care

Table 63: Curative Care Services at the District/General Hospital	
	• Allergic rhinitis • Acute and Chronic Sinusitis • Operation of Deviated Nasal Septum (DNS) c. Throat care • Tonsilitis • Pharyngitis d. Surgical procedures • Myringoplasty • Tonsillectomy • Adenoid • Septoplasty • Parotid Surgery (Benign Disease) • Thyroidectomy (Benign Disease) • Others
14. Dental Care	a. Treatment of common dental diseases (gingivitis, caries, etc.) b. Tooth extraction c. Scaling d. Filling e. Root Canal Treatment (RCT)
15. Alternative Medical Care	a. Homeopathy/Ayurvedi/Unani
16. General Surgery	a. Minor surgeries, • Hernia • Hydrocele • Circumcision • Appendectomy • Others b. Major surgeries • Benign Breast Surgery • Laparotomy • Cholecystectomy • Others
17. Cardiology	a. Rhematic fever b. Ischemic heart disease (IHD) c. Myocardial Infarction (STEMI, Non-STEMI) d. Heart Failure (Emergency attempt need to be provided and referred) e. Vascular Problem- DVT
18. Orthopaedics	a. Correction of dislocation b. Fracture management • Close reduction • Open Reduction and Internal Fixation (ORIF) c. Trauma care
19. Sexual and Gender Based Violence	a. Case identification maintaining confidentiality. b. Counselling c. Emergency contraception d. Treatment of minor injuries

Table 63: Curative Care Services at the District/General Hospital	
	e. Prophylaxis for Sexually transmitted infections f. Psychological support g. Medico-legal care
20. Emergency care Management	a. All types of medical and surgical emergencies b. Stabilization of road traffic-related injuries c. Management of drowning d. First aid e. Minor injuries f. Poisoning g. Animal bite (snake bite, dog bite, cat bite, fox bite) h. Allergic reactions i. Cardiopulmonary Resuscitation (CPR) j. Physical assault k. Trauma Care/management

COMPONENT 3: DIAGNOSTIC SERVICES[96]

A recommended list of diagnostic services that should be available at a 250 bed District Hospital, in the laboratory, radiology, imaging and blood bank units, is provided in Table 64.

Table 64: Diagnostic Services at the District/General Hospital

Laboratory	Radiology and Imaging	Blood Bank
Blood (Analysis by Haematology Auto Analyzer) CBC; TC, DC; Hb; ESR; MP; Blood Urea; CRP, PBF, Hb Electrophoresis; Culture and sensitivity **Serological Test** VDRL; TPHA; Widal Test; ASO; Titer; RA Test; Anti CCP, HBsAg; HIV Test, Anti-HCV, Rk-39; Covid-19 Rapid Antigen Test; Covid-19 RT PCR Test Dengue NS1; Dengue Immunoglobulin Test **Biochemical Test** Random Blood Sugar; HbA1C; S. Creatinine; S. Electrolyte; S. Bilirubin; SGPT; Troponin-I **Thyroid Function Test** S. TSH; FT3; FT4; Anti-thyroid Antibody **Renal Function Test** **Urine** Urine (Routine); Pregnancy Test, Urine Total Protein, Urine Albumin, Urine ACR **STOOL** Stool R/E; Stool OBT **Lipid Profile** S. Cholesterol, HDL, LDL, Total Cholesterol **Liver Function Test** S. Bilirubin; SGPT, SGOT, Alkaline Phosphatase, PT with INR **Blood Grouping** Blood Grouping and Rh typing, BT, CT, **Tuberculosis tests** MT, Sputum for AFB; Gene Xpart for TB, **Special Tests** Lab diagnosis of Lymphatic Filariasis; Skin smear examination for Leprosy Histopathology- FNAC, FNAB **Rapid Detection Test** RDT for Kala-azar, Malaria, Dengue Blood culture, Urine culture, Sputum culture, Pus culture Dope Test	Digital X-ray Dental X-ray Ultrasonography Mammography CT scan ECG Echocardiography Magnetic Resonance Imaging (MRI) Endoscopy ETT Colonoscopy Proctoscopy	Blood Grouping & Cross matching Screening for 5 diseases[97]: • HIV • Syphilis • Malaria • Hepatitis B Surface Antigen • Hepatitis C Virus

[96] Some of the services may be available if qualified human resources and concerned functional equipment are available.

[97] As per the Safe Blood Transfusion Act 2002, the screening with the 5 tests is made compulsory.

COMPONENT 4: PHARMACY SERVICES

The pharmacy is a branch of health care that is responsible for supply of safe, and good quality drugs according to the needs of patients. The services are provided in collaboration with the medical officer/consultant and other allied healthcare providers. It consists of selecting, procuring, storing, and dispensing medications, as well as counselling patients on how to use them safely, effectively, and efficiently.

An electronic drug management information system, for ensuring quality of medications, inventory control, storage of medicines, preventing theft, monitoring expiration date, and preventive measures for rodent and pest control needs to be ensured.

The pharmacy consists of a pharmacy room and different dispensing outlets in the out-patient department (OPD), in-patient departments, Emergency, OT, and labour room. Different in-patient wards, emergency room, OT and labour room also have mini pharmacies to cater their needs. Basic essential standards for maintaining all the pharmacy spaces are listed in Table 65.

Table 65: Pharmacy Services at the District/General Hospital

1. **Requisition**	a. Average consumption and time required after submitting a requisition are to be considered before placing a requisition
2. **Infrastructure**	a. Prominent labelling of the Medicine Storeroom and OPD pharmacy b. Medical storeroom and pharmacy rooms are clean, devoid of dust and dirt. c. A secure outlet to dispense medicine in the pharmacies with proper functional locks to ensure security. Access to storage restricted only to authorized personnel. d. Dedicated counters and separate queues for men and women in the outpatient department pharmacy e. Shelves for storing medicine: • Protection from the adverse effects of light, dampness, and extreme temperature • Free from vermin and insects • Adequate ventilation f. Availability of • Humidity, temperature, and light control mechanism • Fire extinguisher machine with calibration • Functional refrigerator for storing medicine g. Medicine arranged on the racks in alphabetical or pharmacological order considering the expiration date.
3. **Stock Control and Record Keeping**	a. Inventory (register/digital) for Medical and Surgical Requisite (MSR) items • Bin card[98] is in place with updated information. b. A list of available medicines is displayed outside the OPD pharmacy c. All essential medicines are available and adequately stocked (to last three months) • An efficient process for inventory control and management to ensure expired drugs are not in stock. d. Medicines are dispensed with effective counselling.

[98] printed cards used for accounting for the stock of material, in stores.

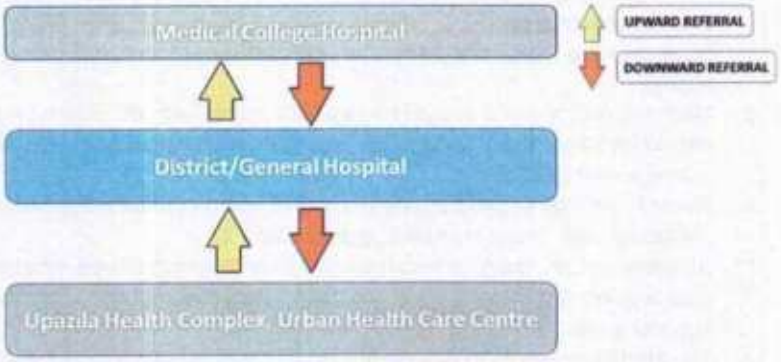
Table 65: Pharmacy Services at the District/General Hospital	
	e. Medicine stock register updated regularly and maintained. That is name, quantity, date of receipt recorded in the stock register at the time of receipt. • Item description • Unit of issue (mg, mL etc) • Receipt of date and issue of stock f. Medicine Distribution to other levels to maintain supply chain across the hospital. • Inpatient departments • Outpatient departments • Emergency • Labor room • Operation Theatres • Others
4. **Effective Stock Rotation and Expiry Monitoring**	a. Follow the First In, First Out (FIFO) principle in conjunction with expiry dates for inventory management b. The expiry dates should be checked at the time of receipt and noted in the stock record register. c. Stock nearing expiry should not be accepted unless it can be used before expiry. d. Medicine expiry dates should be regularly monitored and expired medicine should be immediately segregated and then disposed as per medical waste management protocol. e. Record of drugs expired during the month to be maintained in the register (including date, medicine name, quantity etc.) f. All items are checked for non-moving as well as those items whose expiry date is within 3 months, a list is prepared, segregation is done item wise and supplier wise. g. The medicine near to expiration should be reported to the higher authority.
5. **Demonstration of Good Pharmacy Practices**	a. Maintain requisition slips, registers, storage, dispense with counselling) b. Verification of the patient/client before medications are handed over c. Reconfirming the medication, timing, and the dosage amount with the prescription

COMPONENT 5: REFERRAL

The purpose of a structured referral system is to introduce an efficient upward and downward referral system to maximise the utilisation of the District/General Hospital and minimise the patient load on higher facilities. A healthcare referral system involving health facilities at various levels is recommended in Figure 8 to ensure that patients in need have access to high-quality medical resources.

The upward referral for patients, denoted by the arrows in green, is composed of three pathways, (1) from the Upazila health complex to the District/General Hospital; (2) from Urban Health Care Centres (proposed name for existing Government Outdoor Dispensary) to District/General Hospitals and (3) from District/General Hospitals to Medical College Hospitals. The downward referral for patients, denoted by the arrows in orange, is similarly divided into three pathways (1) from Medical College Hospitals to District/General hospitals; (2) from District/General Hospitals to Upazila Health Complexes and (3) from District/General Hospitals to Urban Health Care Centres.

Figure 8: Referral pathway at District/General Hospital



Effective referral requires clear communication with the referred facility to ensure optimal patient care. The health provider is responsible for updating the referral register and filling out the patient referral form with all necessary information. There should be a referral receiving corner for referral patients/clients so that they are given priority and required support upon arrival at the facility. Equal importance should be given to downward referrals. Digital technology may be used to make it efficient for patients as well as service providers.

In case of emergency, the referred patient will be supported with the facility ambulance for transportation to the referred facilities. The ambulance will have a dedicated driver and a SACMO, both trained on basic life-saving skills to accompany the patient(s). Ambulances to be equipped with essential medical equipment and supplies to stabilize patients before they reach a hospital, including oxygen.

Patients should be referred from the District/General Hospital to the Medical College Hospital

- If the treatment provided at the District/General Hospital does not improve the patient's condition
- For any other condition for which the diagnosis requires further investigation and advanced management.

COMPONENT 6: HUMAN RESOURCES FOR HEALTH

The proposed staffing pattern at a District/General Hospital reflects the adequate skill-mix required to deliver the services described in the earlier components of the NHSS. The management of the District/General Hospital in Bangladesh is entrusted to the Deputy Director/Superintendent. A detailed HR capacity is provided below.

Table 66: List Of Human Resource At A District/General Hospital	
Posts	**Number**
Total	**1265**
Hospital Administration	**152**
Office of the Deputy Director/Superintendent	***7***
Deputy Director/Superintendent	1
Personal Assistant	1
Stenographer cum Computer Operator	1
Office Shohayok	4
Office of the Assistant Director	***12***
Assistant Director (Admn+HR+Finance; Budget: Audit+Store; Procurement & Logistics)	4
Office Assistant cum Computer Typist	4
Office Shohayok	4
Hospital Office	***46***
Administrative Officer	1
Imam	1
Head Assistant	1
Upper Division Assistant	2
Office Assistant cum Data Entry Operator	3
Office Assistant cum Computer Typist	3
Junior Mechanic and Pump Operator	2
Ward Master	4
Receptionist	2
Medical Record Keeper	2
Electrician	1
Sardar	1
Plumber	2
Office Shohayok	3
Security Guard	12
Cleaner	3
Mali	3
Accounts Section	***10***
Accounts Officer	1
Accountant	1
Assistant Accountant	2
Cashier	1
Ticket Clark	5
Medical Store	***7***
Medical Officer - Store	1
Senior Storekeeper	1
Storekeeper	1
Store Attendant	3
Cleaner	1
General Store	***8***
Store Officer	1
Senior Storekeeper	1

Storekeeper	2
Store Attendant	3
Cleaner	1
Transport Services	***7***
Driver/Ambulance Driver	5
Helper	2
Food and Kitchen Service	***15***
Nutritionist	1
Steward	1
Assistant Steward	1
Cook	6
Assistant Cook	6
Laundry and Tailoring Service	***12***
Linen Keeper	2
Tailor	2
Dhupi	8
Waste Management	***3***
Waste Management Officer	1
Waste Management Assistant	2
EPI	***4***
Senior Medical Technologist - EPI	1
Medical Technologist - EPI	1
Vaccine Carrier	1
Office Shohayok	1
IT Section	***7***
Assistant Maintenance Engineer	1
Data Entry cum Computer Operator	6
Statistics Section	***3***
Statistical Officer	1
Statistical Assistant	2
Biomedical	***5***
Assistant Biomedical Engineer	1
Sub-Assistant Engineer (Biomedical)	1
Electro-medical Technician	1
Electrician	2
Public Health and Health Education	***6***
Junior Consultant (Public Health Consultant)	1
Assistant Surgeon (Public Health)	1
Health Educator	1
Data Entry cum Computer Operator	1
Office Shohayok	2
Out-Patient Department	**202**
Resident Medical Officer	1
Office Shohayok	1
Medicine	***6***
Resident Physician (RP)	1
Assistant Surgeon/Medical Officer	2

Office Shohayok	3
General Surgery	***6***
Resident Surgeon (RS)	1
Assistant Surgeon/Medical Officer	2
Office Shohayok	3
Gynae & Obstetrics	***21***
Resident Surgeon (RS)	1
Assistant Surgeon/Medical Officer	2
Senior Staff Nurse	7
Midwives	7
Aya	4
Paediatrics	***5***
Resident Physician (RP)	1
Assistant Surgeon/Medical Officer	2
Office Shohayok	2
Cardiology	***7***
Resident Physician (RP)	1
Assistant Surgeon/Medical Officer	2
Cardiographer	2
Office Shohayok	2
Orthopaedics & Traumatology	***5***
Resident Surgeon (RS)	1
Assistant Surgeon/Medical Officer	2
Office Shohayok	2
Otolaryngology	***5***
Resident Surgeon (RS)	1
Assistant Surgeon/Medical Officer	2
Office Shohayok	2
Ophthalmology	***5***
Resident Surgeon (RS)	1
Assistant Surgeon/Medical Officer	2
Office Shohayok	2
Nephrology & Dialysis	***2***
Assistant Surgeon/Medical Officer	1
Office Shohayok	1
Urology	***2***
Assistant Surgeon/Medical Officer	1
Office Shohayok	1
Neurology	***3***
Resident Physician (RP)	1
Assistant Surgeon/Medical Officer	1
Office Shohayok	1
Dermatology	***6***
Senior Consultant	1
Junior Consultant	1
Assistant Surgeon/Medical Officer	2
Office Shohayok	2

Oncology	***5***
Junior Consultant	1
Assistant Surgeon/Medical Officer	2
Office Shohayok	2
Psychiatry	***9***
Senior Consultant	1
Junior Consultant	1
Assistant Surgeon/Medical Officer	2
Clinical Psychologist	1
Nurse	2
Office Shohayok	2
Dentistry	***23***
Senior Consultant	1
Junior Consultant	2
Assistant Dental Surgeon	4
Nurse	3
Senior Medical Technologist (Dental)	1
Medical Technologist (Dental)	3
Office Assistant cum Computer Steno typist	2
Office Shohayok	3
Aya	2
Cleaner	2
Homeo, Unani & Ayurvedic	***3***
Medical Officer	1
Herbal Assistant	1
Office Shohayok	1
Forensic Medicine	***9***
Senior Consultant	1
Junior Consultant	1
Assistant Surgeon/Medical Officer (Male – 1 and Female – 1)	1
Office Assistant cum Computer Typist	2
Mortuary Caretaker	2
Dome	2
Emergency & Casualty Surgery	***78***
Senior Consultant	1
Junior Consultant (Orthopaedics and Traumatology)	2
Junior Consultant (Paediatrics)	2
Junior Consultant (Cardiology)	2
Junior Consultant (Surgery)	3
Emergency Medical Officer	12
Senior Staff Nurse	24
Sub-Assistant Community Medical Officer (SACMO)	8
Emergency Attendant	8
Stretcher Bearer/Trolley Boy	8
Aya	4
Cleaner	4
Hospital Support Services	**223**

Hospital Pharmacy	***10***
Senior Pharmacist (Diploma)	1
Pharmacist (Diploma)	6
Pharmacy Attendant	2
Cleaner	1
Laboratory Services (Pathology and Allied Subjects)	***50***
Senior Consultant (Pathology)	1
Junior Consultant (Pathology)	2
Junior Consultant (Biochemistry)	1
Junior Consultant (Microbiology)	1
Assistant Surgeon/Medical Officer (Pathology)	4
Assistant Surgeon/Medical Officer (Biochemistry)	1
Assistant Surgeon/Medical Officer (Microbiology)	2
Senior Medical Technologist (Laboratory)	1
Senior Medical Technologist (Biochemistry and Haematology)	1
Medical Technologist (Laboratory)	8
Medical Technologist (Biochemistry and Haematology)	2
Office Assistant cum Computer Steno typist	2
Medical Technician (Laboratory)	12
Office Shohayok	4
Cleaner	8
Radiology & Imaging	***21***
Senior Consultant	1
Junior Consultant	2
Assistant Surgeon/Medical Officer (Radiology & Imaging)	2
Senior Medical Technologist (Radiography)	1
Medical Technologist (Radiography)	4
Technician (Radiography)	6
Office Shohayok	4
Cleaner	1
Transfusion Medicine	***15***
Senior Consultant	1
Junior Consultant	1
Assistant Surgeon/Medical Officer	3
Senior Medical Technologist (Blood Bank)	1
Medical Technologist (Blood Bank)	4
Laboratory Attendant	3
Cleaner	2
Physical Medicine	***9***
Junior Consultant	1
Assistant Surgeon/Medical Officer	1
Senior Medical Technologist (Physiotherapy)	1
Medical Technologist (Physiotherapy)	4
Occupational Therapist	1
Cleaner	1
Anaesthesiology and Pain Medicine	***22***
Senior Consultant	2

Junior Consultant	8
Assistant Surgeon/Medical Officer (Anaesthesiologist)	12
Operation Theatre	***80***
OT Nurse (Senior Staff Nurse)	40
Sterilizer cum Mechanic	2
OT Attendant	16
Autoclave Operator	2
Aya	8
Cleaner	12
Nursing Service	***16***
Nursing Superintendent	2
Deputy Nursing Superintendent	4
Nursing Supervisor	8
Office Assistant cum Computer Typist	1
Aya	1
In-Patient Department	**688**
Medicine	73
Senior Consultant	1
Junior Consultant	2
Assistant Registrar	2
In-door Medical Officer	8
Senior Staff Nurse	36
Ward Attendant	8
Aya	8
Cleaner	8
General Surgery	74
Senior Consultant	2
Junior Consultant (General Surgery, Urology and Paediatric Surgery)	3
Assistant Registrar	2
Assistant Surgeon/Medical Officer	8
Senior Staff Nurse	40
Ward Attendant	8
Aya	6
Cleaner	5
Gynae & Obstetrics	105
Senior Consultant	1
Senior Consultant (Gynae Oncology)	1
Junior Consultant	3
Junior Consultant (Gynae Oncology)	1
Assistant Registrar	2
Assistant Surgeon/Medical Officer	8
Senior Staff Nurse	40
Midwife	25
Ward Attendant	4
Aya	12
Cleaner	8
Paediatrics	59

Senior Consultant	1
Junior Consultant	2
Assistant Registrar	2
Assistant Surgeon/Medical Officer	8
Senior Staff Nurse	32
Ward Attendant	4
Aya	6
Cleaner	4
Cardiology and CCU	65
Senior Consultant	1
Junior Consultant	2
Registrar	1
Assistant Registrar	1
Assistant Surgeon/Medical Officer	8
Senior Staff Nurse	28
Cardiographer	4
Ward Attendant	8
Aya	6
Cleaner	6
Orthopaedics and Traumatology	54
Senior Consultant	1
Junior Consultant	2
Assistant Registrar	1
Assistant Surgeon/Medical Officer	8
Senior Staff Nurse	24
Dresser	2
Ward Attendant	8
Aya	4
Cleaner	4
Otolaryngology	27
Senior Consultant	1
Junior Consultant	2
Assistant Registrar	1
Assistant Surgeon/Medical Officer	4
Senior Staff Nurse	12
Ward Attendant	2
Aya	2
Cleaner	3
Ophthalmology	23
Senior Consultant	1
Junior Consultant	1
Assistant Registrar	1
Assistant Surgeon/Medical Officer	4
Senior Staff Nurse	10
Ward Attendant	2
Aya	1
Cleaner	3

Nephrology	29
Senior Consultant	1
Junior Consultant	1
Register	1
Assistant Registrar	1
Assistant Surgeon/Medical Officer	4
Senior Staff Nurse	12
Ward Attendant	3
Aya	3
Cleaner	3
Neurology	32
Senior Consultant	1
Junior Consultant	1
Register	1
Assistant Registrar	1
Assistant Surgeon/Medical Officer	4
Senior Staff Nurse	12
Ward Attendant	4
Aya	4
Cleaner	4
Critical Care Medicine	71
Senior Consultant	2
Junior Consultant	4
Resident Physician	1
Assistant Surgeon/Medical Officer	8
Senior Staff Nurse	40
Ward Attendant	8
Aya	4
Cleaner	4
Medical Oncology	65
Senior Consultant	1
Junior Consultant	3
Resident Physician	1
Assistant Registrar	2
Assistant Surgeon/Medical Officer	8
Senior Staff Nurse	20
Ward Attendant	14
Aya	8
Cleaner	8
Clinical Nutrition	11
Junior Consultant	1
Assistant Surgeon/Medical Officer	1
Senior Staff Nurse	4
Ward Attendant	2
Aya	2
Cleaner	1

COMPONENT 7: MEDICINES[99]

The list of medicines, contraceptives and vaccines provided in Table 67 is recommended and not exhaustive.

Table 67: List of medicines at the District/General Hospital

Anaesthetics and Preoperative Medications	**Cardiovascular Medicines**
Halothane	Aspirin
Isoflurane	Isosorbide dinitrate
Nitrous Oxide – Oxygen for Anaesthesia	Digoxin
Oxygen	Glyceryl Trinitrate
Thiopental Sodium	Atenolol
Ketamine	Enalapril
Lignocaine with or without Adrenaline	Hydrochlorothiazide
Naproxen	Amlodipine
Nabumetone	Losartan potassium
Sulindac	Simvastatin
Pregabalin	Atorvastatin
Tramadol Hydrochloride	Bisoprolol
Tolperisone Hydrochloride	Carvedilol
Bupivacaine	Nifedipine
Nalbuphine hydrochloride	Valsartan
Fentanyl	Methyldopa
Vecuronium bromide	**Steroids**
Analgesics, Antipyretics, Non-steroidal Anti-Inflammatory	Prednisolone
Aspirin	Hydrocortisone
Paracetamol	Betamethasone
Pethidine Hydrochloride	Fluticasone
Ibuprofen	Clogensol Propriate
Diclofenac sodium	Deflazacort
Ketorolac	**Dermatological Medicines (topical)**
Etoricoxib	Miconazole
Indomethacin	Potassium permanganate
Antiallergics and Medicines in Anaphylaxis	Silver Sulfadiazine
Chlorpheniramine Maleate	Gentian Violet
Hydrocortisone	Neomycin sulphate with Bacitracin
Dexamethasone	Salicylic Acid + Benzoic Acid
Rupatadine	Benzyl Benzoate
Desloratadine	Whitfield ointment
Ketotifen	**Diagnostic Agents**
Cetirizine	Fluorescein
Ebastine	Tropicamide
Antidotes and other substances used in Poisoning	**Disinfectants and Antiseptics**
Activated Charcoal	Chlorhexidine with or without Cetrimide
Atropine Injection	Chlorhexidine 7.1% for cord application

[99] Medicines prescribed by the specialists will only be procured if consultants in those disciplines are available.

Table 67: List of medicines at the District/General Hospital

Pralidoxime
Anticonvulsants/Antiepileptics
Phenobarbitone
Magnesium Sulphate 50%
Phenytoin
Haloperidol
Anti-infective Medicines

Mebendazole
Albendazole
Amoxycillin
Ampicillin
Phenoxymethyl Penicillin
Benzathine Penicillin
Procaine Penicillin
Cephalexin
Ceftriaxone
Cloxacillin
Amoxiclav
Erythromycin
Chloramphenicol
Doxycycline

Co-Trimoxazole
Metronidazole
Nalidixic Acid
Ethambutol
Isoniazid with or without Ethambutol
Pyrazinamide
Rifampicin with or without Isoniazid
Rifampicin + Isoniazid + Pyrazinamide with or without Ethambutol
Rifampicin + Isoniazid + Ethambutol
Clotrimazole
Nystatin
Artemether with Lumefantrine
Artesunate
Quinine
Primaquine
Chloroquine
Heparin
Flucloxacillin
Azithromycin
Fluconazole
Levofloxacin
Ciprofloxacin
Antimigraine Medicines

Povidone-Iodine 10%
Diuretic
Frusemide
Frusemide + Spironolactone
Mannitol infusion solution 10% and 20%
Gastrointestinal medicines
Aluminium Hydroxide Gel with or without Magnesium Trisilicate
Famotidine
Omeprazole
Esomeprazole
Rabeprazole
Metoclopramide Hydrochloride
Sodium Chloride 0.9% with or without Dextrose
Sodium Bicarbonate
Zinc sulphate
Immunological
Tuberculin, purified protein derivative
Polyvalent Antivenoms
Tetanus Toxoid
BCG vaccine
DPT vaccine Pentavalent vaccine (DPT, Hepatitis B, Hib)
Pneumococcal vaccine (PCV)
Poliomyelitis vaccine (OPV & IPV)
MR vaccine (Measles & Rubella)
Measles vaccine
Hepatitis-B vaccine
HPV
Ophthalmological preparations
Gentamycin

Tetracaine/Amethocaine
Oxytocic and other obstetrics drugs
Oxytocin
Misoprostol
Mifepristone
Tranexamic Acid
Vitamins and Minerals
Ascorbic Acid/Vitamin C
Vitamin A
Vitamin B-Complex
Vitamin K
Calcium Gluconate
Ear, Nose and Throat conditions in Children
Ciprofloxacin
Gentamicin + Hydrocortisone

Table 67: List of medicines at the District/General Hospital

Acetylsalicylic Acid
Tolfenamic Acid
Ciprofloxacin
Medicines acting on the respiratory tract
Salbutamol
Salbutamol inhaler
Ipratropium bromide
Steroid inhaler
Nebulization solution (salbutamol + steroid)

Adrenaline/Epinephrine
Theophylline
Solutions correcting water, electrolyte, and acid-base disturbances
Oral Rehydration Salts (ORS)
Cholera Fluid
Dextrose in Water 5%, 25% and 50%
Glucose
Glucose with sodium chloride
Sodium chloride
Hartmann's solution
Water for injection (sterile/pyrogen free)
Medicines affecting the blood
Ferrous Sulphate/Fumarate, with or without Folic Acid
Folic Acid
Heparin
Warfarin
Xylometazoline Hydrochloride (drop/nasal spray)
Medicines for Mental and Behavioural Disorders
Diazepam
Risperidone
Disinfectants and Antiseptics
Chlorhexidine with or without Cetrimide
Chlorhexidine 7.1% for cord application
Povidone-Iodine 10%
Hormones, other Endocrine medicines, and contraceptives
Ethinyl Estradiol + Levonorgestrel
Ethinyl Estradiol + Lynestrenol
Desogesterol + Ethinyl Estradiol

Levonorgestrel
Depot Medroxyprogesterone
Copper-T containing device
Male Condoms
Levonorgestrel-releasing implant
Insulin, short acting
Metformin Hydrochloride

COMPONENT 8: EQUIPMENT[100]

To ensure optimal utilization and safety of the equipment, the following should be ensured:

1. Records of equipment are kept including procurement, equipment defects and failures, maintenance, repair, and disposal.
2. Staff allowed to operate equipment or machinery are appropriately trained and re-trained and no untrained person operates the equipment.
3. Safeguards for electronic equipment are used such as: - Voltage stabilizer - Automatic switch over for emergency (generator)

A recommended list of equipment available at a District/General Hospital is given in Table 68. Quantity is not mentioned as depend on availability of service providers and patients load and thus to be determined locally.

Table 68: The List of Equipment at a District/General Hospital

Emergency	**Anaesthesiology/surgical equipment**
Blood Pressure machine	Anaesthesia machine with ventilator
Thermometer	Anaesthesia machine without ventilator
Glucometer with strips	Autoclave
Lancet	Electric cautery machine
Wheelchair	Diathermy machine
Pulse Oximeter	Operating microscope
Patient trolley	Ceiling mounting OT Light
Saline/drip stand	Portable OT Light
O_2 cylinder with flow meter & mask with labelled (empty/full)	Fracture table
	Hydraulic OT Table
Oxygen Manifold	Sterilizer
Central Oxygen Supply system	Sucker machine (electric)
Oxygen concentrator	Ventilator
ECG machine	**Cardiology equipment**
Suction machine	Defibrillator
Nebulizers	Electrocardiogram (ECG) machine
Sterilizer	Echocardiogram machine
Emergency light	Endotracheal Tube (ETT) machine
Ambu bag	Cardiac monitor
Doppler machine	Holter monitor
Observation	Nebulizer machine
Adult scale	Pulse oximeter
Torches	**Gastroenterology equipment**
Watch	Endoscopy machine
ARI timer	Laparoscopic machine
Height measuring board	**Lab equipment**
Measuring tape (MUAC)	Biochemical auto-analyzer
Blood Pressure machine	Centrifuge machine (electric)
Thermometer	Colorimeter
Glucometer with strips	Electrolyte analyzer

[100] Specialized equipment will only be procured if the consultant of that discipline is available.

Table 68: The List of Equipment at a District/General Hospital

- Lancet
- Wheelchair
- Patient trolley
- Saline/drip stand
- O_2 cylinder with flow meter and mask with labelled (empty/full)
- Oxygen Manifold
- Central Oxygen Supply system
- High Flow Nasal Cannula
- Oxygen concentrator
- ECG machine
- Suction machine
- Nebulizers
- Sterilizer
- Emergency light
- Ambu bag

Intensive Care Unit (ICU) & Coronary Care Unit (CCU)

- Glucometer with strips and lancet
- O_2 cylinder with flow meter and mask with labelled (empty/full)
- Oxygen Manifold
- Central Oxygen Supply system
- High Flow Nasal Cannula
- Defibrillator
- Special Bed (automated)
- ICU Bedside Monitors
- Ventilator
- Endotracheal Tube (ETT or Breathing Tube)
- Intravenous Infusion Pump
- Syringe Driver / Syringe Pump
- Nasogastric Tubes (NG Tube)
- Indwelling Urinary Catheter (IDC)
- Resuscitation bag (Ambu bag)
- Bed-side laboratory examination (Biomarkers, CBC, BUN, Creatinine, Electrolyte)
- Portable Imaging (X-Ray & Echocardiograph)
- Sequential compression devices
- Pulse Oximeter
- Suction machine
- Nebulizers
- Sterilizer
- Bilevel positive airway pressure (BiPAP)
- continuous positive airway pressure (CPAP)
- ELISA machine
- Gas analyser
- Hormone analyser
- Blood cell counter
- Microscope (binocular)
- Syringe pump
- Refrigerator

Obstetric equipment

- Foetal monitor
- Obstetrics forceps
- Obstetric equipment
- Foetal doppler
- Foetal monitor
- Manual Vacuum Aspiration Set
- Obstetrics Vacuum Machine (Ventose)
- Caesarean section set
- Obstetrics squatting chair
- Birthing ball
- Labour Table
- Radiant warmer
- Normal delivery set with trolley[101]
- Neonatal resuscitation set with trolley[102]
- Post Partum Haemorrhage (PPH) set tray
- Eclampsia set tray

Paediatric equipment

- Baby incubator
- Phototherapy unit
- Measuring scale for newborn
- Paediatric (Salter) scale
- Growth Monitoring Chart

Ophthalmic equipment

- Ophthalmoscope
- Ophthalmic Trial Lens Box
- Vision testing chart (snail chart)
- Ishihara chart

ENT Department

- Otoscope
- Hearing screening equipment
- Torches

Mortuary

- Deep Freeze

Dental equipment

- Dental Chair Units (Fully equipped for procedures like scaling, extraction, filling, and root canal

[101] sheets, aprons, blades, thread etc.

[102] Ambu with baby mask, laryngoscope, ETT, penguin sucker etc.

Table 68: The List of Equipment at a District/General Hospital

Central computer station

Blood bank equipment

Blood Transfusion Unit[103]
Blood bag centrifuge
Laminar flow hood
pH meter
Haemoglobin photometer
Blood bank refrigerator
Blood plasma separating machine
Platelet separating machine
Deep freeze (plasma)
Deep freeze (RBC)
Refrigerator
Water bath

Surgery and others

Laryngoscopes
Proctoscope
Laparotomy set
Hysterectomy set
Specula
OT light
OT Table Hydraulic
Suction machine electric
Suture dressing set[104]

Medical Store

Refrigerator
Almirah and rack
Chair and table
Wall clock

Dialysis Unit

Haemodialysis machine
Blood Pressure machine
Stethoscope
Thermometer
Glucometer with strips
O_2 cylinder with flow meter and mask with labelled (empty/full)
Defibrillator
Central oxygen system
Special Bed (automated)
Ventilator
Resuscitation bag (Ambu bag)
Pulse Oximeter

treatment (RCT)
Ultrasonic Scaler (For effective scaling and removal of plaque and tartar)
Light-Curing Unit (For composite fillings)
Dental X-ray Machine (OPG) (For comprehensive imaging of teeth, jaw, and surrounding structures)
Intraoral X-ray Machine (For localized imaging during treatment)
Autoclave (For sterilizing instruments after every use)
Endodontic Rotary Equipment (For RCT, including rotary motors and apex locators)
Amalgamator (For mixing amalgam filling material)
Suction Machine (For maintaining a dry field during procedures)
Intraoral Camera (To assist in diagnosis and patient education)
Diagnostic Set (Mouth mirrors, explorers, probes, tweezers)
Scaling Instruments (Curettes, manual scalers, ultrasonic scaler tips)
Extraction Instruments (Forceps, elevators, surgical instruments)
Restorative Instruments (Amalgam carriers, condensers, matrix bands, composite application tools)
Endodontic Instruments (K-files, H-files, spreaders, pluggers, barbed broaches)
Surgical Instruments (Blades, scissors, tissue forceps, retractors)
Filling Materials (Composites, amalgam, glass ionomer cements)
RCT Materials (Gutta-percha points, sealers, irrigants)
Impression Materials (Alginate, silicone impression material)

Anesthetics (Local anesthetics with syringes and needles)
Sterilization Supplies (Pouches, disinfectants, brushes)
Consumables (Burs, polishing materials, cotton rolls, gauze, suction tips)
Film Viewer or Digital Imaging Software (For

[103] Chair, refrigerator, blood tube sealer, blood transfusion set.
[104] General Surgical instruments (needle holder, Artery, forceps, kidney tray, etc.

Table 68: The List of Equipment at a District/General Hospital

Separate water plant
Dialyzer
Dialysis solution (dialysate)
Tubing for the transport of blood & dialysis solution

Radiology equipment

X-Ray machine digital with Auto-processor
Dental X-ray unit
CT Scanner
C-arm
Dehumidifier
Magnetic Resonance Imaging (MRI) machine
Mammogram machine
Ultrasound machine
viewing and interpreting X-ray results)
Radiographic Accessories (Lead aprons, thyroid collars, positioning devices)

COMPONENT 9: OTHER LOGISTICS

Table 69 presents a recommended list of other logistics needed at a District/General Hospital.

Table 69: List of Logistics at the District/General Hospital	
Furniture	**Infection Prevention**
Patient Examination Table	Soap
Patient Beds (fowler bed) with Bedside Lockers	Sanitizer
Tables	Running water
Dispensing tables	Disinfectant
Chairs	Detergent
Wheelchair	Hand gloves
Stool	Buckets, bowls, mugs, brushes, brooms, dusters & others
Benches with Back Rest	
Electric Fans	Toilet cleaner
Racks	Phenyl
Almirah	Sterilizer
Stretchers	Autoclave
Drip stand	Needle crusher
Patient Trolley	Surgical masks and caps
Food trolley	Eye protector
Medicine trolley	Apron
Printer	**Consumables**
Photocopy machine	Syringes and needles
Facility infrastructure	Gauze
Generators/Solar panel	Bandage
Deep tube well with electric motor	Latex gloves or Hand gloves
Sanitation sewage system	Strips for RDT
Central oxygen system	Cotton Wool
Air conditioners	Laboratory reagents
Electric fans and lights	X-ray films
Medical Waste Management	Blood bags
Black Bin	**Safety**
Yellow Bin	Firefighting equipment (extinguisher, blanket etc.)
Red Bin	CCTV cameras
Green Bin	**Vehicles**
Blue bin	Ambulance
Drain brush, bowl, mug, bucket etc.	Car for Superintendent
Spade, shovel	**Others**
Needle Crusher	Biometric machine for attendance
Waste Carrying Trolly	
Biohazard Waste bags	
Gum Boots	
PPE equipment	

COMPONENT 10: DIGITALIZATION & INFORMATION TECHNOLOGY

The District/General Hospital to be fully digitalized in its operation, correspondence with higher authorities including transmission of reports. As an integral part of the digitization process, all patients/clients seeking health service will be assigned a permanent patient ID number (PID). These PIDs will be derived from the patient/client's birth registration number[105] or the National identification number (NID)[106], contingent upon their age. This patient ID number will be used for future references. The PIDs will be utilised to monitor previous records upon the patient/client's visit to the District/General Hospital, allowing service providers to examine the patient's medical history. Additionally, these PIDs to be valid at all other government health facilities. The electronic transmission of patient/client data to the current DGHS platform should occur on a regular basis. Digitalization will also be incorporated into the referral process of patients between public health facilities and at the pharmacies through the electronic drug management information system.

The Local Area Network (LAN) to be used to connect different service providers such as the consulting physician, pharmacist, laboratory technologist, midwife, to electronically transmit information of attending patient/client.

To operationalize the digitisation the following logistics will be required.

1. Desktop computers
2. Laptops
3. Printers
4. Photocopier
5. Dedicated Broadband Internet Connectivity
6. Local Area Network
7. Video conferencing tools
8. Digital Registration Kiosk[107]
9. Web-based app for patient registration and Electronic Medical Record

[105] for under 18 years
[106] for 18 years and above
[107] As part of the Government's Digitalization plan

COMPONENT 11: PHYSICAL/INFRASTRUCTURE FACILITIES

The additional staff proposed by the NHSS will require additional space at the District/General Hospital. Therefore, the standards suggest a redesign of the District/General Hospital to incorporate the following requirements list in Table 70.

Table 70: Physical Infrastructure Standards at a District/General Hospital

1. **Display and signage**	a. Facility signboards and opening hours displayed at the facility entrance(s) in Bangla b. Adequate and clear signage to be displayed on the main and connecting roads to the facility. c. Citizen charter is displayed at the UzHC entrance in Bangla. d. List of available medicine is displayed and updated daily e. Safety, hazard, and caution signs prominently displayed at relevant places. f. Important information such as contact numbers (e.g., fire, police, ambulance, and referral centres) clearly displayed g. The services to be provided, cleaning schedule, monthly performance chart and relevant behaviour change communication (BCC) messages should be clearly displayed in the rooms
2. **Maintenance**	a. Facility premises to be well maintained and free from • Garbage • Commercial banners, posters, and paintings • Non-functioning equipment • Non-functioning vehicles • Un-authorized establishments b. The facility building is neat and clean. Staff follow written policies and procedures and schedules for: • Disinfection and cleaning of all equipment, furniture, floors, walls, storage areas and other surfaces and areas • Cleaning of specialized areas, e.g., OT, Labour Room, Emergency Ward, etc
3. **Usability**	a. The facility building should be user friendly for all, including the disable. • Functional wheelchairs, patient trolleys and stretchers are available at the gate/reception for patients who are unable to walk. • All patient areas of the hospital are easily accessible by wheelchair. • Multi-story buildings have ramps or functional lifts with an operator. b. Corridors, storage areas, passageways and stairways are well lit. c. There are always clear pathways to and from exits. d. Room arrangement following patients' pathways. e. Floor surfaces are non-slip and even.
4. **Rooms**	a. Multiple ticket counters[108] b. Independent consultation rooms in the outpatient department (OPD) c. Waiting area for clients/patients and attendants • There are designated separate male and female waiting areas d. Breast feeding corner e. Emergency room with proper access

[108] Separate ticket counters for male, female.

Table 70: Physical Infrastructure Standards at a District/General Hospital	
	• Observation room with bed f. Two Labour rooms with attached bathroom and running water supply g. Operation Theatres 4 OTs with 1 OT dedicated for caesarean operations) h. Laboratory • The laboratory is well lit and ventilated. • Storage facilities for specimens and reagents are sufficient to enable staff easy access. • Inspection and maintenance schedules are completed and used for all laboratory equipment. i. Radiology and Imaging room with protection from radiation j. General Store k. Medicine store is separated from General Store l. Toilets: Male, female, and disabled segregated toilets with running water supply for outpatient and inpatient departments m. Multiple handwashing facilities with availability of running water, liquid soap and/or sanitizer. Some for the service providers fitted inside a consultation room and the others for the service recipient fitted in the waiting lobby. n. Vaccination site o. Morgue
5. Utilities	a. Electricity: supply connection with back-up generator or solar for the entire facility b. Water: Running water supply with provision of safe drinking water • A supply line and storage system keep water clean and free from contamination. c. Sanitation: drainage system should be cleaned and maintained d. Central oxygen supply e. Fire Safety: fire extinguishers and fire hoses are easily visible and accessible in strategic areas.
6. Radiology and imaging	a. This unit uses imaging technology to diagnose and treat disease. Radiology may be divided into two different areas, diagnostic radiology, and interventional radiology b. The location of the radiology and imaging services should be easily accessible to the OPD, wards, emergency, and operation theatre complex. c. Radiology section including rooms are labelled clearly (X-ray, ultrasonogram, echocardiogram, MRI, CT scan, Endoscopy) d. Overall cleanliness maintained. e. The Bangladesh Atomic Energy Commission guideline should be available and followed. f. All equipment is subject to tests on installation to ensure the equipment meets with contract specifications and confirms mechanical, electrical and radiation safety. g. Radiology equipment is stable, functioning and installed only in radiation protected rooms in accordance with Nuclear Safety and Radiation Control Rules 1997. h. Radiation protective measure should be in place as per the Bangladesh Atomic Energy Commission guideline. i. Danger sign is displayed in the radiology department (in appropriate place)

Table 70: Physical Infrastructure Standards at a District/General Hospital	
	• Signs (diagrams/poster/banner) warning women of childbearing age of the dangers of radiation in pregnancy are prominently displayed. • Signs (diagrams/poster/banner) warning general patients, their accompanying persons and visitors about the radiation area and radiation hazard of staying within the radiation area and performing the tests are prominently displayed. j. Privacy of patients is ensured during radiological examination with the availability of a • changing room • female attendant • adequate clean gown k. Protective clothing is provided and used around biohazards or radiographic equipment.
7. Labour room	a. The labour room should ensure respectful maternity care by accommodating the birthing process from labour through delivery and recovery of mother and baby in one suite. b. It should not be a thoroughfare and have provisions to change footwear at the entry. c. A dedicated triage space should be ensured. d. The unit should be air-conditioned with an attached functional and clean toilet and running water supply e. Separate areas for dirty linen and decontamination should be clearly demarcated. f. Every delivery should be followed by regular disinfectant-infused washing and mopping to keep the area clean.

COMPONENT 12: INFECTION PREVENTION & CONTROL INCLUDING MEDICAL WASTE MANAGEMENT

Infection prevention and medical waste management (MWM) is paramount in health care facilities as it protects both patients and healthcare workers from diseases. Without controlling the spread of infection, hospitals would become unsafe to go to or visit and operate.

Table 71: Infection Prevention and MWM at District/General Hospital

Infection Prevention & Control	
1. Cleanliness	a. The facility, equipment and supplies are kept clean and safe for clients/patients, visitors/attendants, and staff. b. Facility premises are free from litter and other refuse. c. Equipment, floors, and walls are free from body fluids, dust, spit, and grit. • Disinfectant and detergent should be used for cleaning the floor and wall as applicable. • Cleanliness shall always be maintained by washing and mopping with disinfectants. • Toilets should be cleaned using disinfectant and detergent as applicable. d. OT fumigation periodically and as necessary
2. Hygiene	a. Availability of running water supply, soap, alcohol-based hand disinfectant b. Regular handwashing with soap and/or use of sanitizers
3. Guidelines	a. Guidelines for standard hand washing and infection prevention procedures should be displayed
4. Protective Equipment	a. Availability of face mask, hand gloves b. Regular use of face mask and hand gloves by the service providers
5. Disposal	a. Safe final disposal of medical waste in accordance with the Medical Waste (Management and Processes) Rules 2008 b. Use of auto disposable syringes and needles and disposing them appropriately with medical waste
Medical Waste Management	
1. Guidelines	a. The District/General Hospital should have a documented waste disposal strategy specifying protocols, responsibilities, a schedule for waste collection, and list of necessary equipment (e.g., waste bins and bags). b. A clear guide for waste segregation and storage to be visibly posted in area(s) where medical waste is generated. • This should include waste segregation in clearly labelled coded bins in accordance with the Medical Waste (Management and Processes) Rules 2008. • IEC materials promoting awareness campaign on medical waste management to be displayed at the facilities for both service providers and recipients
2. Capacity building	a. Periodic capacity building needed for staff handling infectious waste on hazards of waste, management of waste and infection control.
3. Maintenance and logistics	a. All waste must be protected from theft, vandalism or scavenging by persons or animals. b. Waste to be segregated at its origin. c. Different color-coded bins to be available in sufficient numbers.

Table 71: Infection Prevention and MWM at District/General Hospital	
	d. Medical waste should be correctly and appropriately disposed of as per the protocol (details in *Table 72*)

Table 72: Medical Waste Management Protocol at District/General Hospital		
Segregation of wastes at source of origin into:	**Coloured bins:**	**Disposing off method**
1. Non-hazardous/infectious, general waste	Black	Burn and/or Burry (in a separate pit[109] than the infectious, hazardous one) or provide to city corporation/municipality garbage collector
2. Non-hazardous with recycled items	Green	Recycle or provide to city corporation/municipality garbage collector
3. Hazardous, Infectious waste	Yellow	Burn and/or bury (in a pre-prepared pit[110])
4. Hazardous, Sharp waste	Red	Bury in a separate pit[111]
5. Hazardous, Infectious liquid waste	Blue	Add disinfectant and keep it for 30 minutes and then throw it down the drain.

[109] Floor of the waste pit should not be covered with concrete or any other means.
[110] Floor of the waste pit should not be covered with concrete or any other means.
[111] Floor of the waste pit should not be covered with concrete or any other means.

COMPONENT 13: MANAGEMENT

The Director, Hospitals and Clinics of the DGHS plays a key role in overall hospital management and administration at the District/General Hospital.

Table 73: Management of District/General Hospital
1. District/General Hospitals are controlled by the Director, Hospitals and Clinics of the DGHS
2. The Superintendent is in-charge of the District/General Hospitals
3. Divisional Director Health is the controlling officer for the superintendent of the District/General Hospital
4. District/General Hospitals human resources are deployed by the DGHS/MOHFW
5. District/General Hospitals receive allocation for MSR, diet and other expenditure from the revenue budget.
6. District/General Hospitals procure MSR, diet and incur other expenditures.
7. District/General Hospitals also get resources (diet, drugs, equipment etc. including finance for deploying staff) from the Hospital Services Management Operation Plan from the development budget.
8. Citizens Charter is displayed in open spaces.
9. Grievance Redress mechanism[112] is in place.
10. Maintenance of Client/Patient and other Registers as mandated by the DGHS
11. Patients' Welfare Fund available for the poor, operated by the Social Welfare Officer
12. Hospital Management Committee headed by the Member of Parliament (MP).
13. Available standard treatment protocols (for identified cases) to be followed strictly
14. Biometric machine for attendance is easily accessible and functional.
• Time and date are updated.
• Uninterrupted electric power available
• All staff are registered.
• Print out is available on spot
15. Display board with information on available medicine list to be present.
16. Separate queues for registration (ticket counter) available
• Male & female
• Senior citizens (elderly)

[112] Through Grievance Redress mechanism, the patients, clients, attendants, visitors of the hospital ventilate their grievance about the service, interactions of the service providers and other staff to the authority for remedial actions. There are many ways in practice. Complain Box is placed in one or more places of the hospital, where the aggrieved may deposit their complains. In a regular interval (weekly, fortnightly etc.) the authority open the box(es) and review the complains to take remedial measures. Then the complains and the actions undertaken are displayed in a designated board to inform the complaints and others about it. DGHS call center of 16263 also work as grievance redress mechanism for all the facilities under it.

COMPONENT 14: HEALTH AND SAFETY

This component is designated to protect the health and safety of clients/patients, staffs and visitors and allow the service delivery to be safe, accessible and respect clients'/patients' need for privacy.

Table 74: Health and Safety Standards at a District/General Hospital	
1. Policies	a. Health and safety policies, procedures and standard protocols are available, displayed and followed by staff to: • Ensure health and safety of patients, staff and visitors are protected. • Ensure service delivery to be safe, accessible and respect clients'/patients' need for privacy. • Prevent contamination incidents related to health care waste. • Follow a sharps and needle-stick injuries (NSI) reporting system, with proper segregation and disposal of sharps. • Provide basic life support b. Current and relevant hazard notices and safety action bulletins are displayed to keep patients, staff and visitors informed.
2. Vaccination	a. Ensure appropriate vaccination for the staff of the hospital
3. Fire Safety	b. Availability of firefighting equipment (fire extinguisher, and fire blanket) c. Trained staff who conduct periodic mock drills. d. Selection of Fire Wardens from staff of different shifts of different categories • Regular periodic drill by the Fire Wardens e. Installation of oxygen indicator machine in key install points (OT, medicine ward, ICU, CCU etc.)
4. Storage	a. Chemicals, medicine, and equipment are stored safely, as per protocols
5. Protection	a. Staff are provided with and use protective equipment, e.g., gloves, aprons, masks for safe handling of hazardous material. b. Staff are provided with appropriate vaccination like Hepatitis B, COVID 19 and others
6. Surveillance Camera (CCTV) Systems	a. Surveillance camera (CCTV) systems installed both inside and outside the facility to ensure: • the safety and security of service providers, and patients, and • prevent the theft of medicine and equipment. b. Recording should be preserved for a minimum of one year.

Bangladesh National Health Services Standard

Volume 4:
Medical College Hospital

To ensure effective delivery of essential health services package: Towards Universal Health Coverage through supporting Primary Health Care approach in Bangladesh

VOLUME 4: NHSS FOR MEDICAL COLLEGE HOSPITAL

There are 18 medical college hospitals with varying bed strengths: 2600 bed -1, 1000 bed - 4, 900 bed-2, 850 bed-1, and 500 bed-10 (Health Bulletin 2021). Bed strength keeps on increasing for two reasons: as the students' intake increases, to comply with the Bangladesh Medical and Dental Council (BM&DC)[113] regulation bed strength needs to increase (i.e., 5 beds for each student); and to increase the coverage of service provision, number of hospital beds are also increase. Considering this, the NHSS for medical college hospitals has been developed for 1000 bed facilities.

[113] A regulatory body with the responsibility of establishing and maintaining standards of medical education, recognition of medical qualifications and registration of medical practitioners in Bangladesh.

COMPONENT 1: PROMOTIVE AND PREVENTIVE SERVICES

All healthcare providers in the Medical College Hospitals will use all their interactions with the patients and their attendants to promote relevant promotive and preventive services. Moreover, hospital OPD and other places (in front of laboratory, radiology, and pharmacy etc.) where patients/attendants wait need to have provision of audio-visual equipment for promotion of the promotive and preventive services on different issues/topics.

COMPONENT 2: CURATIVE CARE SERVICES

Curative care services refer to the control of a condition or treatment provided to a patient to resolve an illness, or to promote recovery from an impairment, or injury. Medical college hospitals provide curative care services through the (1) Out-patient department (OPD), (2) In-patient department (IPD), and (3) Emergency Department. **Table 75** provides a recommended list of hospital bed distribution across the in-patient department.

Table 75: Bed distribution in the in-patient department (IPD)

#	Disciplines/subjects	Unit #	Bed #
1.	Medicine	1	25
		2	25
		3	25
		4[114]	25
2.	Critical Care Medicine and ICU	1	20 + 15
3.	Gynaecology and Obstetrics	1	25
		2	25
		3	25
4.	Paediatrics	1	25
		2	25
5.	Neonatology and NICU	1	25 + 15 NICU
6.	Cardiology	1	25
		2	25
7.	Critical Care Unit	1	25
8.	Orthopaedics and Traumatology	1	25
		2	25
9.	Emergency & Casualty Surgery	1	25
10.	Otolaryngology	1	25
11.	Ophthalmology	1	25
12.	Dermatology	1	25
13.	Psychiatry	1	10
14.	Dentistry	1	10
15.	Nephrology and Dialysis	1	25
16.	Neurology	1	25
17.	Urology	1	25
18.	Respiratory Medicine	1	25
19.	Endocrinology and Metabolism	1	25
20.	Haematology	1	20
21.	Hepatology	1	20

[114] New unit proposed for Geriatric and Palliative care.

Table 75: Bed distribution in the in-patient department (IPD)			
#	Disciplines/subjects	Unit #	Bed #
22.	Gastroenterology	1	25
23.	Radiotherapy	1	15
24.	Infectious Diseases/Isolation	1	25
25.	General Surgery	1	25
		2	25
		3	25
26.	Paediatric Surgery	1	25
27.	Neurosurgery	1	25
28.	Burn and Plastic Surgery	1	25
29.	Physical Medicine and Rehabilitation	1	25
	Total	**39**	**950**[115]

[115] The remaining 50 beds are for Cabin.

COMPONENT 3: DIAGNOSTIC SERVICES

Diagnostic services are important support for preventive and curative care. It assists in screening, diagnosis, monitoring prognosis and in secondary prevention. A recommended list of diagnostic services that should be available at a 1000 bed Medical College Hospital, in the laboratory, radiology and imaging and blood transfusion units, is provided **in Table 76.**

Table 76: List of Diagnostic Services at A Medical College Hospital[116]

Laboratory	Radiology and Imaging	Blood Bank
Blood (Analysis by Haematology Auto Analyzer) CBC; TC, DC; Hb; ESR; MP; Blood Urea; CRP, PBF, Hb Electrophoresis; Culture and sensitivity **Serological Test** VDRL; TPHA; Widal Test; ASO; Titer; RA Test; Anti CCP, HBsAg; HIV Test, Anti-HCV, Rk-39; Covid-19 Rapid Antigen Test; Covid-19 RT PCR Test Dengue NS1; Dengue Immunoglobulin Test **Biochemical Test** Random Blood Sugar; HbA1C; S. Creatinine; S. Electrolyte; S. Bilirubin; SGPT; Troponin-I **Thyroid Function Test** S. TSH; FT3; FT4; Anti-thyroid Antibody **Renal Function Test** **Urine** Urine (Routine); Pregnancy Test, Urine Total Protein, Urine Albumin, Urine ACR **STOOL** Stool R/E; Stool OBT **Lipid Profile** S. Cholesterol, HDL, LDL, Total Cholesterol **Liver Function Test** S. Bilirubin; SGPT, SGOT, Alkaline Phosphatase, PT with INR **Blood Grouping** Blood Grouping and Rh typing, BT, CT, **Tuberculosis tests** MT, Sputum for AFB; Gene Xpart for TB, **Rapid Detection Test** RDT for Kala-azar, Malaria, Dengue Blood culture, Urine culture, Sputum culture, Pus culture **Dope Test**	Digital X-ray Dental X-ray (OPG) Ultrasonography Mammography CT scan ECG Echocardiography Magnetic Resonance Imaging (MRI) Endoscopy ETT Colonoscopy Proctoscopy Angiogram	Blood Grouping & Cross matching Screening for 5 diseases[117]: • HIV • Syphilis • Malaria • Hepatitis B Surface Antigen • Hepatitis C Virus

[116] Subject to availability of concerned consultants
[117] As per the Safe Blood Transfusion Act 2002, the screening with the 5 tests is made compulsory.

COMPONENT 4: PHARMACY SERVICES

The pharmacy is a branch of health care that is responsible for supply of safe, and good quality drugs according to the needs of patients. The services are provided in collaboration with the medical officer/consultant and other allied healthcare providers. It consists of selecting, procuring, storing, and dispensing medications, as well as counselling patients on how to use them safely, effectively, and efficiently.

An electronic drug management information system, for ensuring quality of medications, inventory control, storage of medicines, preventing theft, monitoring expiration date, and preventive measures for rodent and pest control needs to be ensured.

The pharmacy consists of a pharmacy room and different dispensing outlets in the out-patient department (OPD), in-patient departments, Emergency, OT, and labour room. Different in-patient wards, emergency room, OT and labour room also have mini pharmacies to cater their needs. Basic essential standards for maintaining all the pharmacy spaces are listed in Table 77.

Table 77: Pharmacy Services at a Medical College Hospital

1. Requisition	a. Average consumption and time required after submitting a requisition are to be considered before placing a requisition
2. Infrastructure	a. Prominent labelling of the Medicine Storeroom and OPD pharmacy b. Medical storeroom and pharmacy rooms are clean, devoid of dust and dirt. c. A secure outlet to dispense medicine in the pharmacies with proper functional locks to ensure security. Access to storage restricted only to authorized personnel. d. Dedicated counters and separate queues for men and women in the outpatient department pharmacy e. Medicines are stored on shelves, ensuring: • Protection from the adverse effects of light, dampness, and extreme temperature • Free from vermin and insects • Adequate ventilation f. Availability of • Humidity, temperature, and light control mechanism • Fire extinguisher machine with calibration • Functional refrigerator for storing medicine g. Medicine arranged on the racks in alphabetical or pharmacological order considering the expiration date
3. Stock Control & Record Keeping	a. Inventory (register/digital) for Medical and Surgical Requisite (MSR) items • Bin card[118] is in place with updated information. b. A list of available medicines is displayed outside the OPD pharmacy c. All essential medicines are available and adequately stocked (to last three months) • An efficient process for inventory control and management to ensure expired drugs are not in stock. d. Medicines are dispensed with effective counselling.

[118] printed cards used for accounting for the stock of material, in stores.

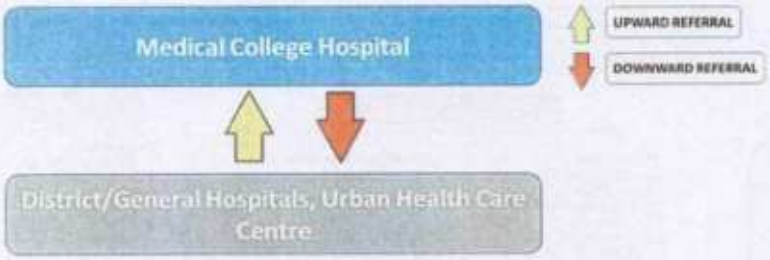
Table 77: Pharmacy Services at a Medical College Hospital	
	e. Medicine stock register updated regularly and maintained. That is name, quantity, date of receipt recorded in the stock register at the time of receipt. • Item description • Unit of issue (mg, mL etc) • Receipt of date and issue of stock f. Medicine Distribution to other levels to maintain supply chain across the hospital. • Inpatient departments • Outpatient departments • Emergency • Labor room • Operation Theatres • Others
4. Effective stock rotation and expiry monitoring	a. Follow the First In, First Out (FIFO) principle in conjunction with expiry dates for inventory management b. The expiry dates should be checked at the time of receipt and noted in the stock record register. c. Stock nearing expiry should not be accepted unless it can be used before expiry. d. Medicine expiry dates should be regularly monitored and expired medicine should be immediately segregated and then disposed as per medical waste management protocol. e. Record of drugs expired during the month to be maintained in the register (including date, medicine name, quantity etc.) f. All items are checked for non-moving as well as those items whose expiry date is within 3 months, a list is prepared, segregation is done item wise and supplier wise. g. The medicine near to expiration should be reported to the higher authority.
5. Demonstration of Good Pharmacy Practices	a. Maintain requisition slips, registers, storage, dispense with counselling) b. Verification of the patient/client before medications are handed over c. Reconfirming the medication, timing, and the dosage amount with the prescription

COMPONENT 5: REFERRAL

The purpose of a structured referral system is to introduce an efficient upward and downward referral system to maximise the utilisation of the Medical College Hospitals and minimise the patient load on higher facilities. A healthcare referral system involving health facilities at various levels is recommended in Figure 9 to ensure that patients in need have access to high-quality medical resources.

The upward referral for patients, denoted by the arrow in green, is composed of two pathways, (1) from the District/General Hospital to the Medical College Hospital and (2) from an Urban Health Care Centre (proposed name for existing Government Outdoor Dispensary) to Medical College Hospitals. The downward referral for patients, denoted by the arrow in orange, is similarly divided into two pathways (1) from Medical College Hospitals to District/General Hospitals and (2) from the Medical College Hospital to Urban Health Care Centres.

Figure 9: Referral pathway from Medical College Hospitals



Effective referral requires clear communication with the referred facility to ensure optimal patient care. The health provider is responsible for updating the referral register and filling out the patient referral form with all necessary information. There should be a referral receiving corner for referral patients/clients so that they are given priority and required support upon arrival at the facility. Equal importance should be given to downward referrals. Digital technology may be used to make it efficient for patients as well as service providers.

In case of emergency, the referred patient will be supported with the facility ambulance for transportation to the referred facilities. The ambulance will have a dedicated driver and a SACMO, both trained on basic life-saving skills to accompany the patient(s). Ambulances to be equipped with essential medical equipment and supplies to stabilize patients before they reach a hospital, including oxygen.

COMPONENT 6: HUMAN RESOURCES FOR HEALTH

A 1000 bed Medical College Hospital will include multiple departments stated under component 2 which will be managed by a required pool of health professionals and facility staff. The proposed staffing pattern at a Medical College Hospital reflects the adequate skill-mix required to deliver the services described in the earlier components of the NHSS. The management of the District/General Hospital in Bangladesh is entrusted to the Director. Figure 10 presents a summary organogram of a Medical College Hospital while Table 78 provides a list of the staff per department.

Figure 10 Summary Organogram of the Medical College Hospital (1000 bed)

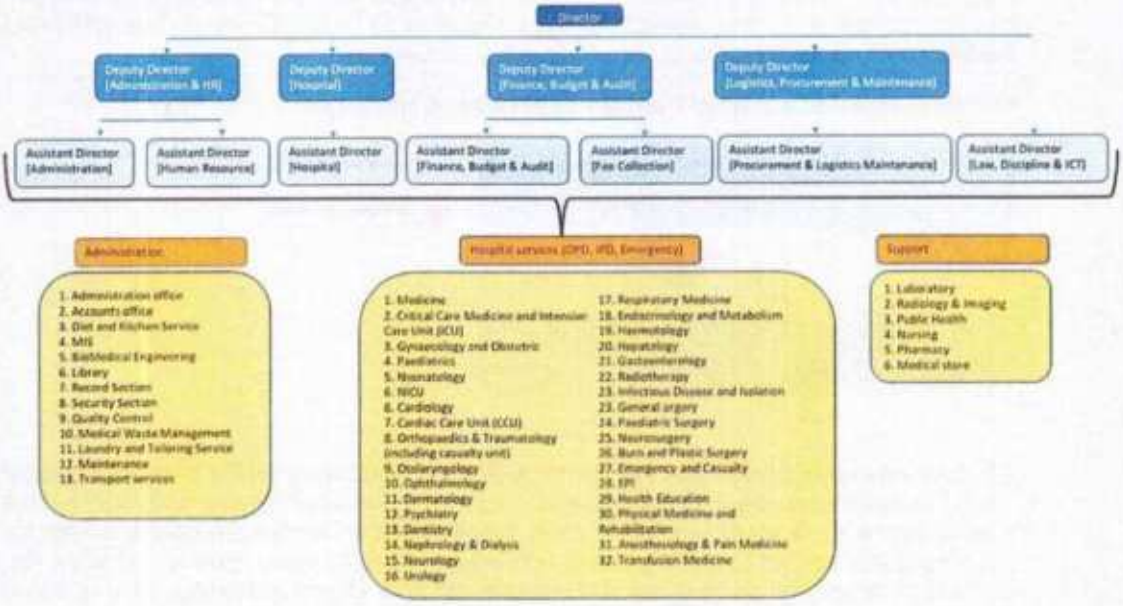


Table 78: List Of Staff Across Departments/Units at a Medical College Hospital

#	Position	Existing	Proposed	Total
Total		510	1675	2185
HOSPITAL ADMINISTRATION		116	224	340
1.1	OFFICE OF DIRECTOR	4	2	6
	Director	1		1
	Personal Officer		1	1
	Stenographer cum Computer Operator	1		1
	Driver	1		1
	Office Sahayak	1		1
	Tea/Coffee Server		1	1
1.2	OFFICE OF DEPUTY DIRECTORS	9	7	16
	Deputy Director (Administration and HR)	1		4

Table 78: List Of Staff Across Departments/Units at a Medical College Hospital

#	Position	Existing	Proposed	Total
	Stenographer cum Computer Operator		1	
	Driver	1		
	Office Sahayak	1		
	Deputy Director (Hospital)		1	
	Stenographer cum Computer Operator		1	4
	Driver	1		
	Office Sahayak	1		
	Deputy Director (Finance, Budget, and Audit)		1	
	Stenographer cum Computer Operator		1	4
	Driver	1		
	Office Sahayak	1		
	Deputy Director (Logistics, Procurement and Maintenance)		1	
	Stenographer cum Computer Operator		1	4
	Driver	1		
	Office Sahayak	1		
1.3	OFFICE OF ASSISTANT DIRECTORS	8	13	21
	Assistant Director (Administration)	1		
	Office Assistant cum Computer Typist		1	3
	Office Sahayak	1		
	Assistant Director (Human Resources)		1	
	Office Assistant cum Computer Typist		1	3
	Office Sahayak	1		
	Assistant Director (Hospital)		1	
	Office Assistant cum Computer Typist		1	3
	Office Sahayak	1		
	Assistant Director (Finance, Budget & Audit)		1	
	Office Assistant cum Computer Typist		1	3
	Office Sahayak	1		
	Assistant Director (Fee Collection)		1	
	Office Assistant cum Computer Typist		1	3
	Office Sahayak	1		
	Assistant Director (Law, Discipline & ICT)		1	
	Office Assistant cum Computer Typist		1	3
	Office Sahayak	1		
	Assistant Director (Logistics and Maintenance)		1	
	Office Assistant cum Computer Typist		1	3
	Office Sahayak	1		
1.4	ADMINISTRATION	42	31	73
	Social Welfare & Public Relations Officer		1	1
	Office Assistant cum Computer Typist		1	1
	Office Sahayak	1		1

Table 78: List Of Staff Across Departments/Units at a Medical College Hospital				
#	Position	Existing	Proposed	Total
	Administrative Officer	1		1
	Imam	1		1
	Moazzin	1		1
	Khadim		1	1
	Head Assistant	1		1
	Upper Division Assistant	2		2
	Office Assistant cum Data Entry Operator	7		7
	Office Assistant cum Computer Typist		4	4
	Telephone Operator		3	3
	Photographer		1	1
	Lift Operator	6	6	12
	Receptionist		4	4
	Ward Master	3	3	6
	Housekeeper	2		2
	Sardar	2	2	4
	Zamadar	2	2	4
	Office Sahayak	5		5
	Cleaner	6		6
	Mali	2	3	5
1.5	**ACCOUNTS OFFICE**	**10**	**6**	**16**
	Accounts Officer	1		1
	Accountant	2		2
	Assistant Accountant	2		2
	Cashier	1	1	2
	Ticket Clerk	3	3	6
	Rent Collector		2	2
	Cash Sarkar	1		1
1.6	**DIET & KITCHEN SERVICE**	**16**	**23**	**39**
	Nutritionist		1	1
	Dietician	1		1
	Steward	1		1
	Diet Clerk		1	1
	Diet Supervisor		2	2
	Diet Distributor		12	12
	Kitchen Supervisor	1		1
	Cook	6		6
	Assistant Cook	6	4	10
	Cleaner	1	3	4
1.7	**MIS**	**2**	**17**	**19**
	System Analyst		1	1
	Programmer		1	1
	Maintenance Engineer		1	1

Table 78: List Of Staff Across Departments/Units at a Medical College Hospital

#	Position	Existing	Proposed	Total
	Assistant Programmer		1	1
	Assistant Maintenance Engineer		1	1
	Data Entry/Control Supervisor		1	1
	Data Entry Operator		7	7
	Cleaner	1		1
	Deputy Chief Medical		1	1
	Assistant Chief Statistics		1	1
	Statistical Officer	1		1
	Statistician		2	2
1.8	**GENERAL STORE**	**4**	**4**	**8**
	Store Officer	1		1
	Senior Storekeeper		1	1
	Storekeeper	2		2
	Store Assistant		1	1
	Store Attendant		2	2
	Cleaner	1		1
1.9	**BIO-MEDICAL ENGINEERING**	**3**	**7**	**10**
	Bio-Medical Engineer		1	1
	Assistant Bio-Medical Engineer		1	1
	Sub-Assistant Engineer (Civil)		1	1
	Sub-Assistant Engineer (Electro-medical)		1	1
	Sub-Assistant Engineer (Electrical)		1	1
	Electro-medical Technician		1	1
	Electrical Technician		1	1
	Electrician	2		2
	Cleaner	1		1
1.10	**LIBRARY**	**1**	**6**	**7**
	Librarian		1	1
	Assistant Librarian		1	1
	Photocopy Machine Operator		1	1
	Peon (Book Binder)		1	1
	Library Attendant		2	2
	Cleaner	1		1
1.11	**RECORD SECTION**	**1**	**3**	**4**
	Record Officer		1	1
	Medical Record Keeper		2	2
	Office Sahayak	1		1
1.12	**SECURITY SECTION**	**9**	**35**	**44**
	Security Officer		1	1
	Head Guard		4	4
	Guard	9	30	39
1.13	**QUALITY CONTROL**	**1**	**2**	**3**

Table 78: List Of Staff Across Departments/Units at a Medical College Hospital				
#	Position	Existing	Proposed	Total
	Medical Officer Quality Control		1	1
	Office Assistant cum Computer Typist		1	1
	Office Sahayak	1		1
1.14	**MEDICAL WASTE MANAGEMENT**	**0**	**11**	**11**
	Waste Management Officer		1	1
	Waste Management Assistant		10	10
1.15	**LAUNDRY & TAILORING SERVICE**	**3**	**17**	**20**
	Laundry Supervisor		1	1
	Linen Keeper	3	1	4
	Tailor		2	2
	Tailor Assistant		1	1
	Calenderer		4	4
	Dhopi		8	8
1.15	**MAINTENANCE SECTION**	**2**	**22**	**24**
	Plumber		6	6
	Carpenter		2	2
	Welder		2	2
	Electrician	2	4	6
	Pump/Generator Operator		4	4
	Fire fighter/Medical Gas Line Checker		4	4
1.16	**TRANSPORT SERVICES**	**1**	**18**	**19**
	Driver (Heavy)		2	2
	Driver (Light)	1	6	7
	Ambulance Driver		4	4
	Mechanic (Vehicle)		2	2
	Patient Attendant (Ambulance)		4	4
2	**HOSPITAL SERVICE (IPD, OPD and EMERGENCY)**[119]	**304**	**1324**	**1630**
2.1	**MEDICINE**	**77**	**46**	**123**
	Chief Consultant -Medicine		1	1
	Senior Consultant -Medicine	2		2
	Senior Consultant – Geriatric and Palliative Care		1	1
	Resident Physician Medicine	1		1
	Consultant [120]	3	1	4
	Registrar	1	3	4
	Assistant Registrar	3	13	16
	Assistant Surgeon/Medical Officer	3	1	4
	Senior Staff Nurse	39	9	48

[119] Chief/Senior Consultant of the respective department will prepare roster duties of the staff to manage OPD and all units of the IPD

[120] Existing Junior Consultant posts are proposed to re-designate as Consultant

Table 78: List Of Staff Across Departments/Units at a Medical College Hospital				
#	Position	Existing	Proposed	Total
	Office Sahayak	3	1	4
	Ward Attendant	9	3	12
	Aya	4	8	12
	Cleaner	9	4	13
	Office Assistant		1	1
2.2	**CRITICAL CARE MEDICINE AND ICU**	**0**	**68**	**68**
	Senior Consultant		1	1
	Consultant		1	1
	Assistant Registrar		14	14
	Senior Staff Nurse		20	20
	Ward Attendant		12	12
	Aya		12	12
	Cleaner		8	8
2.3	**GYANE & OBS**	**51**	**97**	**148**
	Chief Consultant Gynae & Obs	1		1
	Senior Consultant Gynae & Obs	2		2
	Resident Surgeon Gynae & Obs	1		1
	Consultant	3		3
	Registrar	1	2	3
	Assistant Registrar	3	9	12
	Assistant Surgeon/Medical Officer	3	1	4
	Senior Staff Nurse	30	11	41
	Midwife	0	20	20
	Ward Attendant		9	9
	Office Shahayak		3	3
	Aya	4	20	24
	Cleaner	3	21	24
	Office Assistant		1	1
2.4	**PAEDIATRICS**	**36**	**38**	**74**
	Chief Consultant Paediatrics	1		1
	Senior Consultant Paediatrics	1		1
	Resident Physician Paediatrics	1		1
	Consultant	2		2
	Registrar	1	1	2
	Assistant Registrar	2	14	16
	Assistant Surgeon/Medical Officer	2	2	4
	Office Sahayak		2	2
	Senior Staff Nurse	26		26
	Ward Attendant	0	6	6
	Aya		6	6
	Cleaner		6	6
	Office Assistant		1	1

Table 78: List Of Staff Across Departments/Units at a Medical College Hospital				
#	Position	Existing	Proposed	Total
2.5	**NEONATOLOGY**	**2**	**46**	**48**
	Chief Consultant		1	1
	Consultant		2	2
	Registrar	1		1
	Assistant Registrar	1	11	12
	Assistant Surgeon/Medical Officer		4	4
	Senior Staff Nurse		12	12
	Ward Attendant		6	6
	Aya		6	6
	Cleaner		3	3
	Office Assistant		1	1
2.6	**NICU**	**0**	**31**	**31**
	Senior Consultant		1	1
	Registrar		1	1
	Assistant Registrar		8	8
	Senior Staff Nurse		12	12
	Ward Attendant		3	3
	Aya		3	3
	Cleaner		3	3
2.7	**CARDIOLOGY**	**16**	**71**	**87**
	Chief Consultant Cardiology	1		1
	Senior Consultant Cardiology	2		2
	Resident Physician Cardiology		1	1
	Consultant	2		2
	Registrar	1	1	2
	Assistant Registrar	2	14	16
	Assistant Surgeon/Medical Officer	2	2	4
	Cardiographer	4		4
	ECG Technician	1	1	2
	ECHO Technician	1	1	2
	ETT Technician		2	2
	Halter Technician		2	2
	Office Sahayak		2	2
	Senior Staff Nurse	0	26	26
	Ward Attendant		6	6
	Aya		6	6
	Cleaner		6	6
	Office Assistant		1	1
2.8	**CARDIAC CARE UNIT (CCU)**	**0**	**50**	**50**
	Senior Consultant - CCU		1	1
	Consultant		1	1
	Registrar		1	1

Table 78: List Of Staff Across Departments/Units at a Medical College Hospital				
#	Position	Existing	Proposed	Total
	Assistant Registrar		12	12
	Senior Staff Nurse		16	16
	Office Shahayak		1	1
	Ward Attendant		6	6
	Aya		6	6
	Cleaner		6	6
2.9	**ORTHOPAEDICS AND TRAUMATOLOGY**	**8**	**32**	**40**
	Chief Consultant Orthopaedics and Traumatology	1		1
	Senior Consultant	1		1
	Resident Surgeon Orthopaedics and Traumatology	1		1
	Consultant	1		1
	Registrar	1		1
	Assistant Registrar	1	4	5
	Assistant Surgeon/Medical Officer	2	1	3
	Office Sahayak		2	2
	Senior Staff Nurse		13	13
	C-Arm Operator		2	2
	Ward Attendant		3	3
	Aya		3	3
	Cleaner		3	3
	Office Assistant		1	1
2.10	**OTOLARYNGOLOGY**	**5**	**28**	**33**
	Chief Consultant Otolaryngology	1		1
	Senior Consultant		1	1
	Resident Surgeon Otolaryngology		1	1
	Consultant		1	1
	Registrar	1		1
	Assistant Registrar	1	4	5
	Assistant Surgeon/Medical Officer	2		2
	Office Sahayak		2	2
	Senior Staff Nurse		9	9
	Ward Attendant		3	3
	Aya		3	3
	Cleaner		3	3
	Office Assistant		1	1
2.11	**OPHTHALMOLOGY**	**4**	**28**	**32**
	Chief Consultant Ophthalmology	1		1
	Senior Consultant		1	1
	Resident Surgeon Ophthalmology		1	1

Table 78: List Of Staff Across Departments/Units at a Medical College Hospital				
#	Position	Existing	Proposed	Total
	Consultant		1	1
	Registrar	1		1
	Assistant Registrar	1	4	5
	Assistant Surgeon/Medical Officer	1	1	2
	Office Sahayak		2	2
	Senior Staff Nurse		8	8
	Ward Attendant		3	3
	Aya		3	3
	Cleaner		3	3
	Office Assistant		1	1
2.12	**DERMATOLOGY**	**1**	**31**	**32**
	Chief Consultant Dermatology		1	1
	Senior Consultant		1	1
	Consultant		2	2
	Registrar		1	1
	Assistant Registrar		2	2
	Assistant Surgeon/Medical Officer Dermatology		2	2
	Office Sahayak		2	2
	Senior Staff Nurse		11	11
	Ward Attendant		3	3
	Aya		3	3
	Cleaner	1	2	3
	Office Assistant		1	1
2.13	**PSYCHIATRY**	**0**	**31**	**31**
	Chief Consultant Psychiatry		1	1
	Senior Consultant		1	1
	Consultant		2	2
	Registrar		1	1
	Assistant Registrar		3	3
	Assistant Surgeon/Medical Officer Psychiatry		2	2
	Office Sahayak		2	2
	Senior Staff Nurse		9	9
	Ward Attendant		3	3
	Aya		3	3
	Cleaner		3	3
	Office Assistant		1	1
2.14	**DENTISTRY**	**6**	**36**	**42**
	Chief Consultant Dentistry		1	1
	Senior Consultant		1	1
	Consultant		2	2
	Senior Dental Surgeon		1	1

Table 78: List Of Staff Across Departments/Units at a Medical College Hospital				
#	Position	Existing	Proposed	Total
	Registrar		1	1
	Assistant Registrar		3	3
	Assistant Dental Surgeon	4	2	6
	Senior Medical Technologist (Dental)		1	1
	Medical Technologist (Dental)	1	4	5
	Office Sahayak		2	2
	Senior Staff Nurse		9	9
	Ward Attendant		3	3
	Aya		3	3
	Cleaner	1	2	3
	Office Assistant		1	1
2.15	**NEPHROLOGY AND DIALYSIS**	**2**	**66**	**68**
	Chief Consultant Nephrology and Dialysis		1	1
	Senior Consultant Nephrology		1	1
	Senior Consultant Dialysis		1	1
	Resident Physician Nephrology and Dialysis		1	1
	Consultant Nephrology		1	1
	Consultant Dialysis		1	1
	Registrar	1		1
	Assistant Registrar	1	7	8
	Assistant Surgeon/Medical Officer		2	2
	Office Sahayak		2	2
	Senior Staff Nurse		12	12
	Senior Staff Nurse Dialysis		9	9
	Dialysis Technician		12	12
	Ward Attendant		6	6
	Aya		6	6
	Cleaner		3	3
	Office Assistant		1	1
2.16	**NEUROLOGY**	**2**	**38**	**40**
	Chief Consultant Neurology		1	1
	Senior Consultant		1	1
	Resident Physician Neurology		1	1
	Consultant		1	1
	Registrar	1		1
	Assistant Registrar	1	7	8
	EEG Technician		2	2
	EMG Technician		2	2
	Assistant Surgeon/Medical Officer		2	2
	Office Sahayak		2	2
	Senior Staff Nurse		9	9
	Ward Attendant		3	3

Table 78: List Of Staff Across Departments/Units at a Medical College Hospital				
#	Position	Existing	Proposed	Total
	Aya		3	3
	Cleaner		3	3
	Office Assistant		1	1
2.17	**UROLOGY**	**2**	**31**	**33**
	Chief Consultant Urology		1	1
	Senior Consultant		1	1
	Resident Surgeon Urology		1	1
	Consultant		1	1
	Registrar	1		1
	Assistant Registrar	1	4	5
	Assistant Surgeon/Medical Officer Urology		2	2
	Office Sahayak		2	2
	Senior Staff Nurse		9	9
	Ward Attendant		3	3
	Aya		3	3
	Cleaner		3	3
	Office Assistant		1	1
2.18	**RESPIRATORY MEDICINE**	**1**	**32**	**33**
	Chief Consultant Respiratory Medicine		1	1
	Senior Consultant		1	1
	Consultant		2	2
	Registrar	1		1
	Assistant Registrar		5	5
	Assistant Surgeon/Medical Officer Respiratory Medicine		2	2
	Office Sahayak		2	2
	Senior Staff Nurse		9	9
	Ward Attendant		3	3
	Aya		3	3
	Cleaner		3	3
	Office Assistant		1	1
2.19	**ENDOCRINOLOGY AND METABOLISM**	**0**	**34**	**34**
	Chief Consultant Endocrinology & Metabolism		1	1
	Senior Consultant		1	1
	Consultant		2	2
	Clinical Nutritionist		1	1
	Registrar		1	1
	Assistant Registrar		5	5
	Assistant Surgeon/Medical Officer Endocrinology and Metabolism		2	2
	Office Sahayak		2	2
	Senior Staff Nurse		9	9

Table 78: List Of Staff Across Departments/Units at a Medical College Hospital				
#	Position	Existing	Proposed	Total
	Ward Attendant		3	3
	Aya		3	3
	Cleaner		3	3
	Office Assistant		1	1
2.20	**HAEMATOLOGY**	**0**	**33**	**33**
	Chief Consultant Haematology		1	1
	Senior Consultant		1	1
	Consultant		2	2
	Registrar		1	1
	Assistant Registrar		5	5
	Assistant Surgeon/Medical Officer Haematology		2	2
	Office Sahayak		2	2
	Senior Staff Nurse		9	9
	Ward Attendant		3	3
	Aya		3	3
	Cleaner		3	3
	Office Assistant		1	1
2.21	**HEPATOLOGY**	**0**	**35**	**35**
	Chief Consultant Hepatology		1	1
	Senior Consultant		1	1
	Consultant		2	2
	Registrar		1	1
	Assistant Registrar		5	5
	Assistant Surgeon/Medical Officer Hepatology		2	2
	ERCP Technician		2	2
	Office Sahayak		2	2
	Senior Staff Nurse		9	9
	Ward Attendant		3	3
	Aya		3	3
	Cleaner		3	3
	Office Assistant		1	1
2.22	**GASTROENTEROLOGY**	**0**	**37**	**37**
	Chief Consultant Gastroenterology		1	1
	Senior Consultant		1	1
	Consultant		2	2
	Registrar		1	1
	Assistant Registrar		5	5
	Assistant Surgeon/Medical Officer Gastroenterology		2	2
	Endoscopy Technician		2	2
	ERCP Technician		2	2

Table 78: List Of Staff Across Departments/Units at a Medical College Hospital				
#	Position	Existing	Proposed	Total
	Office Sahayak		2	2
	Senior Staff Nurse		9	9
	Ward Attendant		3	3
	Aya		3	3
	Cleaner		3	3
	Office Assistant		1	1
2.23	**RADIOTHERAPY**	**0**	**45**	**45**
	Chief Consultant Radiotherapy		1	1
	Senior Consultant Radiotherapy		1	1
	Resident Surgeon		1	1
	Consultant		2	2
	Registrar		1	1
	Assistant Registrar		5	5
	Assistant Surgeon/Medical Officer		2	2
	Medical Physicist		1	1
	Senior Medical Technologist (Radiotherapy)		1	1
	Medical Technologist (Radiotherapy)		4	4
	System Analyst		1	1
	Programmer		1	1
	Maintenance Engineer		1	1
	Assistant Programmer		1	1
	Assistant Maintenance Engineer		1	1
	Senior Staff Nurse		9	9
	Office Sahayak		2	2
	Ward Attendant		3	3
	Aya		3	3
	Cleaner		3	3
	Office Assistant		1	1
2.24	**INFECTIOUS DISEASE AND ISOLATION**	**0**	**33**	**33**
	Chief Consultant		1	1
	Senior Consultant Infectious Disease		1	1
	Consultant		2	2
	Registrar		1	1
	Assistant Registrar		5	5
	Assistant Surgeon/Medical Officer		2	2
	Office Sahayak		2	2
	Senior Staff Nurse		9	9
	Ward Attendant		3	3
	Aya		3	3
	Cleaner		3	3
	Office Assistant		1	1
2.25	**GENERAL SURGERY**	**48**	**54**	**102**

Table 78: List Of Staff Across Departments/Units at a Medical College Hospital				
#	Position	Existing	Proposed	Total
	Chief Consultant General Surgery	1		1
	Senior Consultant Surgery	1	1	2
	Resident Surgeon	1		1
	Consultant	2	1	3
	Registrar	1	2	3
	Assistant Registrar	2	16	18
	Assistant Surgeon/Medical Officer	1	3	4
	Office Sahayak	1	2	3
	Senior Staff Nurse	26	13	39
	Ward Attendant	6	3	9
	Aya		9	9
	Cleaner	6	3	9
	Office Assistant		1	1
2.26	**PAEDIATRIC SURGERY**	**3**	**31**	**34**
	Chief Consultant Paediatric Surgery		1	1
	Senior Consultant		1	1
	Consultant		2	2
	Registrar	1		1
	Assistant Registrar	1	4	5
	Assistant Surgeon/Medical Officer Paediatric Surgery		2	2
	Office Sahayak	1	2	3
	Senior Staff Nurse		9	9
	Ward Attendant		3	3
	Aya		3	3
	Cleaner		3	3
	Office Assistant		1	1
2.27	**NEUROSURGERY**	**0**	**34**	**34**
	Chief Consultant Neurosurgery		1	1
	Senior Consultant		1	1
	Resident Surgeon		1	1
	Consultant		2	2
	Registrar		1	1
	Assistant Registrar		5	5
	Assistant Surgeon/Medical Officer		2	2
	Office Sahayak		2	2
	Senior Staff Nurse		9	9
	Ward Attendant		3	3
	Aya		3	3
	Cleaner		3	3
	Office Assistant		1	1
2.28	**BURN AND PLASTIC SURGERY**	**0**	**29**	**29**

Table 78: List Of Staff Across Departments/Units at a Medical College Hospital				
#	Position	Existing	Proposed	Total
	Chief Consultant Burn and Plastic Surgery		1	1
	Senior Consultant		1	1
	Consultant		2	2
	Registrar		1	1
	Assistant Registrar		5	5
	Senior Staff Nurse		9	9
	Ward Attendant		3	3
	Aya		3	3
	Cleaner		3	3
	Office Assistant		1	1
2.29	**EMERGENCY & CASUALTY[121]**	**20**	**70**	**90**
	Senior Consultant, Orthopaedic & Traumatology		2	2
	Consultant, Orthopaedic & Traumatology		1	1
	Consultant Surgery		1	1
	Resident Surgeon		1	1
	Registrar	1	1	2
	Assistant Registrar	2	14	16
	Emergency Medical Officer		16	16
	Assistant Surgeon/Medical Officer		4	4
	Senior Staff Nurse	5	11	16
	SACMO		4	4
	Dresser		2	2
	Emergency Attendant		10	10
	Stretcher Bearer	6	6	12
	Aya	3	1	4
	Office Shohayok		2	2
	Cleaner	3	1	4
	Public Relation Assistant		3	3
	Office Assistant		1	1
2.30	**EPI**	**0**	**7**	**7**
	Senior Medical Technologist (EPI)		1	1
	Vaccinator		4	4
	Vaccine Carrier		2	2
2.31	**HEALTH EDUCATION SECTION**	**2**	**7**	**9**
	Junior Health Education Officer		1	1
	Audio-visual Technical Officer		1	1
	Health Educator		1	1
	Audio-visual Operator		1	1
	Audio-visual Technician		1	1

[121] Providing One Stop Emergency Care (OSEC)

Table 78: List Of Staff Across Departments/Units at a Medical College Hospital

#	Position	Existing	Proposed	Total
	Audio-visual Helper		1	1
	Office Sahayak	1		1
	Cleaner	1		1
	Office Assistant		1	1
2.32	**PHYSICAL MEDICINE AND REHABILITATION**	**6**	**45**	**51**
	Chief Consultant Physical Medicine and Rehabilitation		1	1
	Senior Consultant		1	1
	Consultant		2	2
	Registrar		1	1
	Assistant Registrar		3	3
	Assistant Surgeon/Medical Officer		3	3
	Chief Therapist (concerned discipline)		1	1
	Occupational Therapist		1	1
	Senior Medical Technologist (Physiotherapy)		1	1
	Senior Medical Technologist (Occupational Therapist)		1	1
	Senior Medical Technologist (Speech Therapist)		1	1
	Senior Medical Technologist (Orthotist)		1	1
	Physiotherapist	2		2
	Medical Technologist (Physiotherapy)	3	3	6
	Medical Technologist (Occupational Therapist)		2	2
	Medical Technologist (Speech Therapist)		2	2
	Medical Technologist (Orthotist)		2	2
	Senior Staff Nurse		9	9
	Office Sahayak		1	1
	Ward Attendant		3	3
	Aya		3	3
	Cleaner	1	2	3
	Office Assistant		1	1
2.33	**ANESTHESIOLOGY AND PAIN MEDICINE**	**7**	**11**	**18**
	Chief Consultant Anesthesiology and Pain Medicine	1		1
	Senior Consultant	1	2	3
	Consultant	1	8	9
	Anesthesiologist	4		4
	Office Assistant		1	1
2.34	**TRANSFUSION MEDICINE**	**4**	**19**	**23**
	Chief Consultant Transfusion Medicine		1	1
	Senior Consultant		1	1

Table 78: List Of Staff Across Departments/Units at a Medical College Hospital

#	Position	Existing	Proposed	Total
	Consultant	1		1
	Assistant Surgeon/Medical Officer		4	4
	Senior Medical Technologist (Blood Bank)		1	1
	Medical Technologist (Blood Bank)		4	4
	Laboratory Attendant		4	4
	User Fee Collector		3	3
	Cleaner	3		3
	Office Assistant		1	1
2.35	**ALTERNATIVE MEDICAL CARE**	**3**	**0**	**3**
	Medical Officer Homeopathy/Unani/Ayurvedic	1		1
	Compounder	1		1
	Herbal Assistant	1		1
3	**SUPPORT SERVICES**	**88**	**127**	**215**
3.1	**LABORATORY**	**18**	**40**	**58**
	Chief Consultant (Pathology)		1	1
	Chief Consultant (Histopathology)		1	1
	Chief Consultant (Biochemistry)		1	1
	Chief Consultant (Microbiology)		1	1
	Senior Consultant (Pathology)	1		1
	Senior Consultant (Histopathology)		1	1
	Senior Consultant (Biochemistry)		1	1
	Senior Consultant (Microbiology)		1	1
	Consultant (Pathology)	1		1
	Consultant (Histopathology)		1	1
	Consultant (Biochemistry)		1	1
	Consultant (Microbiology)		1	1
	Senior Clinical Pathologist	1		1
	Medical Officer (Laboratory)		4	4
	Clinical Pathologist	3		3
	Clinical Biochemist		1	1
	Clinical Microbiologist		1	1
	Biochemist (Nonmedical)	1	1	2
	Senior Medical Technologist (Laboratory)		1	1
	Senior Medical Technologist (Biochemistry/ Hepatology)		1	1
	Medical Technologist (Laboratory)	9		9
	Medical Technologist (Biochemistry / Hepatology)		2	2
	User Fee Collector		10	10
	Laboratory Attendant		6	6
	Cleaner	2	2	4
	Office Assistant		1	1

Table 78: List Of Staff Across Departments/Units at a Medical College Hospital				
#	Position	Existing	Proposed	Total
3.2	**RADIOLOGY AND IMAGING**	**8**	**15**	**23**
	Chief Consultant Radiology and Imaging		1	1
	Senior Consultant	1		1
	Consultant	1		1
	Radiologist	1	3	4
	Special Radiographer		2	2
	Senior Medical Technologist (Radiology and Imaging)		1	1
	Medical Technologist (Radiology and Imaging)	4	2	6
	X-Ray machine printing operator		3	3
	User Fee Collector		2	2
	Cleaner	1		1
	Office Assistant		1	1
3.3	**PUBLIC HEALTH**	**0**	**2**	**2**
	Epidemiologist		1	1
	Surveillance Medical Officer		1	1
3.4	**NURSING SERVICES**	**55**	**54**	**109**
	Nursing Superintendent	1		1
	Deputy Nursing Superintendent	1	1	2
	Nursing Supervisor	8	7	15
	Office Assistant cum Computer Operator		1	1
	Aya	1		1
	Cleaner	1		1
	OT Nurse (Senior Staff Nurse): GOT-12 & EOT-1	35	17	52
	Sterilizer cum Mechanic	2	2	4
	OT Attendant	6	6	12
	Autoclave Operator		4	4
	Aya		8	8
	Cleaner		8	8
3.5	**PHARMACY**	**6**	**9**	**15**
	Chief Pharmacist (Graduate)		1	1
	Senior Pharmacist (Diploma)		1	1
	Pharmacist (Diploma)	6	4	10
	Pharmacy Assistant		1	1
	Pharmacy Attendant		2	2
3.6	**MEDICAL STORE**	**1**	**7**	**8**
	Senior Store Officer (Medical)		1	1
	Medical Officer (Store)		1	1
	Instrument Ledger Clark		1	1
	Instrument Caretaker	1	1	2
	Store Attendant		2	2

Table 78: List Of Staff Across Departments/Units at a Medical College Hospital				
#	Position	Existing	Proposed	Total
	Cleaner		1	1

COMPONENT 7: MEDICINES

Recommended list of essential medicine at the Medical College Hospitals is given in Table 79.

Table 79: List of Medicines at the Medical College Hospital	
Anaesthetics and Preoperative Medications	**Medicines affecting the blood**
Halothane	Ferrous Sulphate/Fumarate, with or without Folic Acid
Isoflurane	Folic Acid
Nitrous Oxide – Oxygen for Anaesthesia	Heparin
Oxygen	Warfarin
Thiopental Sodium	**Cardiovascular Medicines**
Ketamine	Aspirin
Lignocaine with or without Adrenaline	Isosorbide dinitrate
Naproxen	Digoxin
Nabumetone	Glyceryl Trinitrate
Sulindac	Atenolol
Pregabalin	Enalapril
Tramadol Hydrochloride	Hydrochlorothiazide
Tolperisone Hydrochloride	Amlodipine
Bupivacaine	Losartan potassium
Nalbuphine hydrochloride	Simvastatin
Fentanyl	Atorvastatin
Vecuronium bromide	Bisoprolol
Analgesics, Antipyretics, Non-steroidal Anti-Inflammatory	Carvedilol
Aspirin	Nifedipine
Paracetamol	Valsartan
Pethidine Hydrochloride	Methyldopa
Ibuprofen	**Steroids**
Diclofenac sodium	Prednisolone
Ketorolac	Hydrocortisone
Etoricoxib	Betamethasone
Indomethacin	Fluticasone
Antiallergics and Medicines in Anaphylaxis	Clogensol Propriate
Chlorpheniramine Maleate	Deflazacort
Hydrocortisone	**Dermatological Medicines (topical)**
Dexamethasone	Miconazole
Rupatadine	Potassium permanganate
Desloratadine	Silver Sulfadiazine
Ketotifen	Gentian Violet
Cetirizine	Neomycin sulphate with Bacitracin
Ebastine	Salicylic Acid + Benzoic Acid
Antidotes and other substances used in	Benzyl Benzoate

Table 79: List of Medicines at the Medical College Hospital	
Poisoning	Whitfield ointment
Activated Charcoal	**Diagnostic Agents**
Atropine Injection	Fluorescein
Pralidoxime	Tropicamide
Anticonvulsants/Antiepileptics	**Diuretic**
Phenobarbitone	Frusemide
Magnesium Sulphate 50%	Frusemide + Spironolactone
Phenytoin	Mannitol infusion solution 10% and 20%
Haloperidol	**Gastrointestinal medicines**
Anti-infective Medicines	Aluminium Hydroxide Gel with or without Magnesium Trisilicate
Mebendazole	Famotidine
Albendazole	Omeprazole
Amoxycillin	Esomeprazole
Ampicillin	Rabeprazole
Phenoxymethyl Penicillin	Metoclopramide Hydrochloride
Benzathine Penicillin	Sodium Chloride 0.9% with or without Dextrose
Procaine Penicillin	Sodium Bicarbonate
Cephalexin	Zinc sulphate
Ceftriaxone	**Immunological**
Cloxacillin	Tuberculin, purified protein derivative
Amoxiclav	Polyvalent Antivenoms
Erythromycin	Tetanus Toxoid
Chloramphenicol	BCG vaccine
Doxycycline	DPT vaccine Pentavalent vaccine (DPT, Hepatitis B, Hib)
Co-Trimoxazole	Pneumococcal vaccine (PCV)
Metronidazole	Poliomyelitis vaccine (OPV & IPV)
Nalidixic Acid	MR vaccine (Measles & Rubella)
Ethambutol	Measles vaccine
Isoniazid with or without Ethambutol	Hepatitis-B vaccine
Pyrazinamide	HPV
Rifampicin with or without Isoniazid	**Ophthalmological preparations**
Rifampicin + Isoniazid + Pyrazinamide with or without Ethambutol	Gentamycin
Rifampicin + Isoniazid + Ethambutol	Tetracaine/Amethocaine
Clotrimazole	**Oxytocic and other obstetrics drugs**
Nystatin	Oxytocin
Artemether with Lumefantrine	Misoprostol
Artesunate	Mifepristone
Quinine	Tranexamic Acid
Primaquine	**Vitamins and Minerals**
Chloroquine	Ascorbic Acid/Vitamin C
Heparin	Vitamin A
Flucloxacillin	Vitamin B-Complex
Azithromycin	Vitamin K
Fluconazole	Calcium Gluconate
Levofloxacin	**Ear, Nose and Throat conditions in Children**
Ciprofloxacin	

Table 79: List of Medicines at the Medical College Hospital	
Antimigraine Medicines	Ciprofloxacin
Acetylsalicylic Acid	Gentamicin + Hydrocortisone
Tolfenamic Acid	Xylometazoline Hydrochloride (drop/nasal spray)
Ciprofloxacin	**Medicines for Mental and Behavioural Disorders**
Medicines acting on the respiratory tract	Diazepam
Salbutamol	Risperidone
Salbutamol inhaler	**Disinfectants and Antiseptics**
Ipratropium bromide	Chlorhexidine with or without Cetrimide
Steroid inhaler	Chlorhexidine 7.1% for cord application
Nebulization solution (salbutamol + steroid)	Povidone-Iodine 10%
Adrenaline/Epinephrine	**Hormones, other Endocrine medicines, and contraceptives**
Theophylline	Ethinyl Estradiol + Levonorgestrel
Solutions correcting water, electrolyte, and acid-base disturbances	Ethinyl Estradiol + Lynestrenol
Oral Rehydration Salts (ORS)	Desogesterol + Ethinyl Estradiol
Cholera Fluid	Levonorgestrel
Dextrose in Water 5%, 25% and 50%	Depot Medroxyprogesterone
Glucose	Copper-T containing device
Glucose with sodium chloride	Male Condoms
Sodium chloride	Levonorgestrel-releasing implant
Hartmann's solution	Insulin, short acting
Water for injection (sterile/pyrogen free)	Metformin Hydrochloride

COMPONENT 8: EQUIPMENT

To ensure optimal utilization and safety of the equipment, the following should be ensured:

1. Records of equipment are kept including procurement, equipment defects and failures, maintenance, repair, and disposal.
2. Staff allowed to operate equipment or machinery are appropriately trained and re-trained and no untrained person operates the equipment.
3. Safeguards for electronic equipment are used such as: - Voltage stabilizer - Automatic switch over for emergency (generator)

Quantity of the equipment and other logistics is not mentioned as it will vary in different medical college hospitals, depending on number and types of service providers and patient/client loads, both of which are inter-dependent.

Table 80: List of Equipment at Medical College Hospital

Emergency	**Anaesthesiology/surgical equipment**
Blood Pressure machine - Digital	Anaesthesia machine with ventilator
Thermometer - Digital	Anaesthesia machine without ventilator
Glucometer with strips	Autoclave
Lancet	Electric cautery machine
Wheelchair	Operating microscope
Pulse Oximeter	Ceiling mounting OT Light
Patient trolley	Portable OT Light
Saline/drip stand	Fracture table
O_2 cylinder with flow meter and mask with labelled (empty/full)	Hydraulic OT Table
	Sterilizer
Oxygen Manifold	Sucker machine (electric)
Central Oxygen Supply system	Ventilator
Oxygen concentrator	**Cardiology equipment**
ECG machine	Coronary angiogram machine
Suction machine	Defibrillator
Nebulizers	Electrocardiogram (ECG) machine
Sterilizer	Echocardiogram machine
Emergency light	Endotracheal Tube (ETT) machine
Ambu bag	Cardiac monitor
Doppler machine	Holter monitor
Observation	Nebulizer machine
Adult scale	Pulse oximeter
Torches	**Gastroenterology equipment**
Watch	Endoscopy machine
ARI timer	Laparoscopic machine
Height measuring board	**Lab equipment**
Measuring tape (MUAC)	Biochemical auto-analyzer
Blood Pressure machine	Centrifuge machine (electric)
Thermometer	Colorimeter
Glucometer with strips	Electrolyte analyzer
Lancet	ELISA machine
Wheelchair	Gas analyzer
Patient trolley	Hormone analyzer

Table 80: List of Equipment at Medical College Hospital	
Saline/drip stand	Blood cell counter
O_2 cylinder with flow meter and mask with labelled (empty/full)	Microscope (binocular)
Oxygen Manifold	Syringe pump
Central Oxygen Supply system	Refrigerator
High Flow Nasal Cannula	**Delivery and Obstetric equipment**
Oxygen concentrator	Foetal monitor
ECG machine	Obstetrics forceps
Suction machine	Obstetric equipment
Nebulizers	Foetal doppler
Sterilizer	Foetal monitor
Emergency light	Manual Vacuum Aspiration Set
Ambu bag	Obstetrics Vacuum Machine (Ventose)
Intensive Care Unit (ICU) & Coronary Care Unit (CCU)	Caesarean section set
	Obstetrics squatting chair
	Birthing ball
Glucometer with strips and lancet	Labour Table
O_2 cylinder with flow meter and mask with labelled (empty/full)	Radiant warmer
	Normal delivery set with trolley[122]
Oxygen Manifold	Neonatal resuscitation set with trolley[123]
Central Oxygen Supply system	Post Partum Haemorrhage (PPH) set tray
High Flow Nasal Cannula	Eclampsia set tray
Defibrillator	**Paediatric equipment**
Special Bed (automated)	Baby incubator
ICU Bedside Monitors	Bubble continuous positive airway pressure (bCPAP) machine
Ventilator	
Endotracheal Tube (ETT or Breathing Tube)	Phototherapy unit
Intravenous Infusion Pump	Measuring scale for newborn
Syringe Driver / Syringe Pump	Paediatric (Salter) scale
Nasogastric Tubes (NG Tube)	Growth Monitoring Chart
Indwelling Urinary Catheter (IDC)	**Ophthalmic equipment**
Resuscitation bag (Ambu bag)	Phaco machine
Bed-side laboratory examination (Biomarkers, CBC, BUN, Creatinine, Electrolyte)	Retinoscope
	Ophthalmoscope
Portable Imaging (X-Ray & Echocardiograph)	Ophthalmic Trial Lens Box
Sequential compression devices (bed sore preventer)	Vision testing chart (snail chart)
	Ishihara chart
Pulse Oximeter	**Psychiatry equipment**
Suction machine	Electroconvulsive therapy (ECT) machine
Nebulizers	electroencephalogram (EEG) machine
Sterilizer	**Urology equipment**
Bilevel positive airway pressure (BiPAP)	Cystoscopy Machine
continuous positive airway pressure (CPAP)	**Mortuary**
Central computer station	Deep freeze
Blood bank equipment	**ENT Department**

[122] sheets, aprons, blades, thread etc.

[123] Ambu with baby mask, laryngoscope, ETT, penguin sucker etc.)

Table 80: List of Equipment at Medical College Hospital	
Blood bag centrifuge	Otoscope
Laminar flow hood	Hearing screening equipment
pH meter	Torches
Haemoglobin photometer	**Dental Department**
Blood bank refrigerator	Fully equipped Dental Chair Units (with integrated equipment for general and specialized procedures)
Blood plasma separating machine	Portable Dental Units (for bedside or outreach services)
Platelet separating machine	Surgical Dental Units (for oral and maxillofacial surgeries)
Deep freeze (plasma)	Paediatric Dental Chairs designed for children
Deep freeze (RBC)	Dental Loupe and Microscope (for enhanced precision in procedures like root canal treatment and surgery)
Refrigerator	Dental X-ray Machines (Intraoral, Extraoral, OPG, CBCT)
Water bath	Digital Imaging Systems (for diagnostics and treatment planning)
Surgery and others	Intraoral Cameras for real-time imaging
Laryngoscopes	Cephalometric X-ray Machine (for orthodontic diagnostics)
Proctoscope	Diagnostic Instruments (mirrors, explorers, probes)
Laparotomy set	Scaling and Polishing Instruments (manual and ultrasonic scalers)
Hysterectomy set	Extraction Instruments (forceps, elevators, periotomes)
Colonoscope	Endodontic Instruments (K-files, apex locators, rotary systems)
Balloon-tipped catheter for angioplasty	Restorative Instruments (amalgam carriers, composite applicators, matrix systems)
Facilities for Coronary artery bypass graft:(CABG)	Prosthodontic Instruments (impression trays, wax knives, articulators)
Capnograph machine	Periodontal Instruments (curettes, scalers, flap surgery tools)
Specula	Oral Surgery Instruments (scalpels, bone files, retractors, suturing kits)
OT light	Orthodontic Instruments (pliers, wires, bands, brackets)
OT Table Hydraulic	Dental Lasers (for soft and hard tissue applications)
Suction machine electric	Electrocautery Unit for minor surgeries
Suture dressing set[124]	Bone Grafting Equipment for implantology
Medical Store	Implantology Kits including surgical drills and prosthetic components
Refrigerator	Sedation and Anesthesia Equipment (for advanced
Almirah and rack	
Chair and table	
Wall clock	
Dialysis Unit	
Haemodialysis machine	
Blood Pressure machine	
Stethoscope	
Thermometer	
Glucometer with strips	
O_2 cylinder with flow meter and mask with labelled (empty/full)	
Defibrillator	
Central oxygen system	
Special Bed (automated)	
Ventilator	

[124] General Surgical instruments (needle holder, Artery, forceps, kidney tray, etc.)

Table 80: List of Equipment at Medical College Hospital	
Resuscitation bag (Ambu bag)	Procedures)
Pulse Oximeter	Restorative Materials (composite, amalgam, glass ionomer, cements)
Separate water plant	Endodontic Materials (gutta-percha, sealers, irrigants)
Dialyzer	Impression Materials (alginate, polyvinyl siloxane)
Dialysis solution (dialysate)	Surgical Consumables (sutures, gauze, disinfectants)
Tubing for the transport of blood & dialysis solution	Orthodontic Consumables (brackets, wires, elastics)
Radiology and Imaging equipment	Dental Laboratory Equipment for prosthesis fabrication (casting machine, wax heaters, grinders)
X-Ray machine digital with Auto-processor	CAD/CAM Systems for digital prosthetic design
Dental X-ray unit	3D Printers for dental applications
CT Scanner	Sterilization Equipment (autoclaves, ultrasonic cleaners)
C-arm	
Dehumidifier	
Magnetic Resonance Imaging (MRI) machine	
Mammogram machine	
Ultrasound machine	

COMPONENT 9: OTHER LOGISTICS

Table 81 provides a recommended list of other logistics that should be available at a Medical College Hospital.

Table 81: List of Other Logistics at a Medical College Hospital

Furniture And Fixtures	**Infection Control**
Patient Examination Table	Soap
Patient Beds with Bedside Lockers	Sanitizer
Tables	Running water
Chairs	Disinfectant
Stools	Detergent
Benches with Back Rest	Hand gloves
Electric Fans	Buckets, bowls, mugs, brushes, brooms, dusters &
Air-Conditioners	others
Almirah	Toilet cleaner
Dispensing Tables	Phenyl
Racks	Sterilizer
Mortuary Freeze	Autoclave
Facility Infrastructure	Needle crusher
Generators/Solar panel	Surgical masks and caps
Deep tube well with electric motor	Eye protector
Sanitation sewage system	Apron
Central oxygen system	**Consumables**
Air conditioners	Syringes and needles
Electric fans and lights	Gauze
Medical Waste Management	Bandage
Black Bin	Latex gloves or Hand gloves
Yellow Bin	Strips for RDT
Red Bin	Cotton Wool
Green Bin	Laboratory reagents
Blue bin	X-ray films
Drain brush, bowl, mug, bucket etc.	Blood bags
Paddle bins	**Safety**
Biohazard Waste bags	Firefighting equipment (extinguisher, blanket etc.)
Gum Boots	CCTV cameras
PPE equipment	**Vehicles**
Others	Vehicle for Director
Biometric machine for attendance	Microbus for senior staff
	Ambulance
	Truck

COMPONENT 10: DIGITALIZATION & INFORMATION TECHNOLOGY

The Medical College Hospital is to be fully digitalized in its operation, correspondence with higher authorities including transmission of reports. As an integral part of the digitization process, all patients/clients seeking health service will be assigned a permanent patient ID number (PID). These PIDs will be derived from the patient/client's birth registration number[125] or the National identification number (NID)[126], contingent upon their age. This patient ID number will be used for future references. The PIDs will be utilised to monitor previous records upon the patient/client's visit to the Medical College Hospital, allowing service providers to examine the patient's medical history. Additionally, these PIDs to be valid at all other government health facilities. The electronic transmission of patient/client data to the current DGHS platform should occur on a regular basis. Digitalization will also be incorporated into the referral process of patients between public health facilities and at the pharmacies through the electronic drug management information system.

The Local Area Network (LAN) to be used to connect different service providers such as the consulting physician, pharmacist, laboratory technologist, midwife, to electronically transmit information of attending patient/client.

To operationalise the digitisation the following equipment and logistics will be required.

1. Desktop computers
2. Laptops
3. Printers
4. Photocopier
5. Scanner
6. Uninterruptible power supply (UPS)
7. Dedicated Broadband Internet Connectivity
8. Local Area Network
9. Multimedia
10. Public Adress (PA) system
11. Mobile phone(s)
12. Digital camera
13. Video camera
14. Video conferencing tools
15. Digital Registration Kiosk[127]
16. Web-based app for patient registration and Electronic Medical Record

[125] for under 18 years

[126] for 18 years and above

[127] As part of the Government's Digitalization plan

COMPONENT 11: PHYSICAL/INFRASTRUCTURE FACILITIES

Table 82 provides a recommended requirement of the overall physical infrastructure requirement at a Medical College Hospital with attention to some rooms/units.

Table 82: Physical Infrastructure Standards at a Medical College Hospital	
1. **Display and signage**	a. Facility signboards and opening hours displayed at the facility entrance(s) in Bangla b. Adequate and clear signage to be displayed on the main and connecting roads to the facility. c. Citizen charter is displayed and visible to the visitors at the entrance in Bangla. d. List of available medicine is displayed and updated daily e. Safety, hazard, and caution signs prominently displayed at relevant places. f. Important information such as contact numbers (e.g., fire, police, ambulance, and referral centres) clearly displayed g. The services to be provided, cleaning schedule, monthly performance chart and relevant behaviour change communication (BCC) messages should be clearly displayed in the rooms h. An information/help desk is available with staff present. i. Signage/guiding sign or direction board for visitors are available for each department. j. The reception area and wards are clearly labelled. k. Information about the hospital services is displayed clearly including: • The rights of the clients/patients • Services and facilities available in the hospital • Costs of services • Feedback and complaints pathways. l. The hospital specifies visiting hours and communicates these to the public.
2. **Maintenance**	a. Facility premises to be well maintained and free from • Garbage • Commercial banners, posters, and paintings • Non-functioning equipment • Non-functioning vehicles • Un-authorized establishments b. The facility building is neat and clean. Staff follow written policies and procedures and schedules for: • Disinfection and cleaning of all equipment, furniture, floors, walls, storage areas and other surfaces and areas • Cleaning of specialized areas, e.g., OT, Labour Room, Emergency Ward, etc c. Vehicles are parked in the parking area. d. Drains are clean and not overflowing. e. Sewerage pits are present with cover.
3. **Usability**	a. The facility building should be user friendly for all, including the disable. • Functional wheelchairs, patient trolleys and stretchers are available at the gate/reception for patients who are unable to walk. • All patient areas of the hospital are easily accessible by wheelchair.

Table 82: Physical Infrastructure Standards at a Medical College Hospital	
	• Multi-story buildings have ramps or functional lifts with an operator. b. Corridors, storage areas, passageways and stairways are well lit. c. There are always clear pathways to and from exits. d. Room arrangement following patients' pathways. e. Floor surfaces are non-slip and even. f. Facilities and equipment for the safety and comfort of clients/patients and visitors are available and functioning and include: • Refreshment facilities and canteen • Quiet rooms for consultations • A public telephone • Breastfeeding corner. • Adequate Chairs • Separate queues for male and females wherever required. • Safe drinking water facilities • Sheltered outside areas with planting and greenery. –
4. Rooms	a. Multiple ticket counters[128] b. Independent consultation rooms in the outpatient department (OPD) c. Waiting area for clients/patients and attendants • There are designated separate male and female waiting areas d. Breast feeding corner e. Emergency room with proper access • Observation room with bed f. Two Labour rooms with attached bathroom and running water supply g. Operation Theatres 4 OTs with 1 OT dedicated for caesarean operations) h. Laboratory • The laboratory is well lit and ventilated. • Storage facilities for specimens and reagents are sufficient to enable staff easy access. • Inspection and maintenance schedules are completed and used for all laboratory equipment. i. Radiology and Imaging room with protection from radiation • j. General Store k. Medicine store is separated from General Store l. Toilets: Male, female, and disabled segregated toilets with running water supply for outpatient and inpatient departments m. Multiple handwashing facilities with availability of running water, liquid soap and/or sanitizer. Some for the service providers fitted inside a consultation room and the others for the service recipient fitted in the waiting lobby. n. Vaccination site o. Morgue
5. Utilities	a. Electricity: supply connection with back-up generator/solar/IPS for the entire facility b. Water: Running water supply with provision of safe drinking water

[128] Separate ticket counters for male, female.

Table 82: Physical Infrastructure Standards at a Medical College Hospital	
	• A supply line and storage system keep water clean and free from contamination. • an Un-interrupted Water supply (Deep Tube well/others) c. Sanitation: drainage system should be cleaned and maintained d. Central oxygen supply e. Fire Safety: fire extinguishers and fire hoses are easily visible and accessible in strategic areas. f. Electrical, water, ventilation, medical gas, and other key systems are y inspected, maintained, and improved, if necessary. g. The facility has a well-maintained herbal medicine garden.
6. Radiology and Imaging	a. This unit uses imaging technology to diagnose and treat disease. Radiology may be divided into two different areas, diagnostic radiology, and interventional radiology b. The location of the radiology and imaging services should be easily accessible to the OPD, wards, emergency, and operation theatre complex. c. Radiology section including rooms are labelled clearly (X-ray, ultrasonogram, echocardiogram, MRI, CT scan, Endoscopy) d. Overall cleanliness maintained. e. The Bangladesh Atomic Energy Commission guideline should be available and followed. f. Radiation protective measure should be in place as per the Bangladesh Atomic Energy Commission guideline. g. All equipment is subject to tests on installation to ensure the equipment meets with contract specifications and confirms mechanical, electrical and radiation safety. h. Radiology equipment is stable, functioning and installed only in radiation protected rooms in accordance with Nuclear Safety and Radiation Control Rules 1997. i. Danger sign is displayed in the radiology department (in appropriate place) • Signs (diagrams/poster/banner) warning women of childbearing age of the dangers of radiation in pregnancy are prominently displayed. • Signs (diagrams/poster/banner) warning general patients, their accompanying persons and visitors about the radiation area and radiation hazard of staying within the radiation area and performing the tests should be properly displayed. j. Privacy of patients is ensured during radiological examination with the availability of a • changing room • female attendant • adequate clean gown k. Protective clothing is provided and used around biohazards or radiographic equipment.
7. Labour Room	a. The labour room should ensure respectful maternity care by accommodating the birthing process from labour through delivery and recovery of mother and baby in one suite. b. It should not be a thoroughfare and have provisions to change footwear at the entry.

Table 82: Physical Infrastructure Standards at a Medical College Hospital	
	c. A dedicated triage space should be ensured. d. The unit should be air-conditioned with an attached functional and clean toilet and running water supply. e. Separate areas for dirty linen and decontamination should be clearly demarcated. f. Every delivery should be followed by regular disinfectant-infused washing and mopping to keep the area clean.
8. **Emergency Room**	a. Hospital Emergency rooms are easily accessible from different parts of catchment area and preferably separate from Outpatient Department (OPD) b. The entrance should be clearly signposted from outside the hospital. Signage of emergency should be displayed at the entry of the hospital with additional signage at key points. c. Ideally it should have a separate entrance that is not connected to the OPD main entrance so that patients requiring emergency care and resuscitation can be easily identified and attended to. d. Ambulances should have easy access and a clear path, plenty of room for their vehicles to pass, and a covered spot for patients to disembark. e. The doorways and access are suitable for wheelchairs and trolleys. Adequate number of functioning trolleys and wheelchair are available all the time at a designated area. f. Emergency areas shall have dedicated triage, resuscitation, and observation area. g. Hallways, clinical and public areas are clear of equipment, beds, or other obstructions. h. There are toilet facilities suitable and available for males, females and disabled. i. Sufficient separate waiting areas and public amenities for patients and relatives should be available and located in such a way that it does not disturb the effective functioning of the emergency department.
9. **Operation Theatre (OT)**	a. OT area and rooms should be clearly labelled. b. The location of Operation Theatre Complex should be in a quiet environment, free from noise and other disturbances, contamination, and possible cross-infection. c. Close linkages with the surgical ward, high dependency/ICU, radiology and imaging, laboratory, blood bank/storage unit and others. d. This unit also needs constant specialized services such as piped suction and medical gas supply, electric supply, heating, air-conditioning (air handling unit), ventilation, and efficient lift service, if the theatres are located on upper floors. Ductless air handling units should be preferred. e. Zoning should be maintained to keep the theatres free from microorganisms. There should be four well-defined zones of varying degrees of cleanliness/asepsis namely, Protective Zone, Clean Zone, Aseptic or Sterile Zone, and Disposal or Dirty Zone. f. An Operation Theatre Complex should also have a Reception, Pre-operative Room, and Post-Operative Resting Room. g. There should also be a scrub-up room where the operating team washes and scrubs their hands and arms. Proper handwashing facility available inside the

Table 82: Physical Infrastructure Standards at a Medical College Hospital	
	OT with running water, elbow tap, handwashing surgical scraps, handwashing brush and liquid soap h. Separate male and female changing, and rest rooms are needed for theatre staff. i. The operating room should be dust-proof. j. Certain parameters, such as the Temperature, humidity inside the OT need to be assessed and monitored regularly to ensure effective management of OT complex as per OT standard operating procedures k. Laminar flow should be maintained in the operating theatre. It should have a single-leaf door with a self-closing device and a viewing window for communication. l. Overall cleanliness maintained. m. Specialized Operation theatres must have separate theatre governed by specific protocol. n. Daily operation schedule and records are maintained. o. Safe surgery checklist is used. p. OT register is in place and is regularly maintained. q. OT schedule (for departments) for a week is made available to hospital staff. r. Emergency medicine tray available and correctly labelled s. Schedule for the OT nurses on duty is clearly displayed. t. Waste bins are adequate in number, correctly labelled and placed and maintained.
10. Intensive Care Unit (ICU) and Coronary Care Unit (CCU)	An intensive care unit (ICU) or a coronary care unit (CCU) is a hospital ward specialized in the care of patients with cardiac conditions that require continuous monitoring and treatment such as heart attacks, unstable angina, and cardiac dysrhythmia. a. Units are clearly labelled. b. Patients' files appropriately kept in organized manner at the nursing station. c. Overall cleanliness maintained. d. ICU should be easily accessible to the departments from which patients are usually admitted, such as the accident and emergency department, recovery room, surgical and medical ward. e. Elevators and corridors attached to ICU are extra-wide. f. ICU follow the standard operating procedure. g. There are written policies and procedures agreed and followed for the following: • Clothing of staff and visitors • Filtering of clients'/patients' respired air • Changing of catheters, humidifiers, and ventilator tubing • Isolation of at-risk or infected clients/patients • Cleaning of the unit. h. Each bed has a central line facility for: • Oxygen • Suction • Compressed air • Central ECG monitoring

Table 82: Physical Infrastructure Standards at a Medical College Hospital	
	i. The ICU accommodation consists of the patient areas and management base, equipment and consumables storage areas and rooms, separate clean and dirty utility rooms, Nurses office, Doctor's office(s), staff sitting room, doctor's retiring room, laboratory, relatives' waiting rooms, reception area a procedure room. j. A functional resuscitation trolley and defibrillator are available on the unit. k. Rooms to be air-conditioned. l. PTR (pulse, temperature, and respiration) chart is present with each bed. m. Clinical records to be maintained[129] n. Nursing staff maintain call registers for doctors. o. Medicine trays should be adequately fully stocked with medicine.
11. Laboratory	a. Rooms should be clearly labelled. b. Overall cleanliness maintained. c. The laboratory environment is well lit, ventilated and not underground. d. Board with list of tests, price should be displayed at a visible place. e. Adequate seating arrangements, fans, and light f. Staff follow written policies and procedures for collection, transport and controlling, storing, reporting, and disposing of all samples and tests in compliance with legal requirements g. Staff facilities include: • Locker space • Toilet and washing/shower facilities. • Staff rest room h. Adequate supply of reagents and kits i. List of reagent and kits with expiry date j. A separate register to be maintained for expired dated reagents and kits. k. Reagent and kits to be stored in appropriate refrigerator with temperature chart. l. Reagent and kits inside the refrigerator should be labelled and arranged in appropriate order as per expiry date. m. A mechanism is in place to restrict access to the laboratory to authorized personnel only. n. Health and safety policies, current relevant hazard notices and safety action bulletins are displayed as required or are readily available to staff, including but not limited to: • Safety regulations • Hand hygiene • Fire precautions • HIV/AIDS • Hepatitis
12. Blood Bank	Blood transfusion units are responsible for the process of transferring blood products into a person's circulation intravenously. a. Adequate supply of reagents and kits b. List of reagent and kits with expiry date

[129] Clinical records to include date and time of admission, patients' history, physical examination notes, patient follow up.

Table 82: Physical Infrastructure Standards at a Medical College Hospital	
	c. A separate register to be maintained for expired dated reagents and kits. d. Reagent and kits to be stored in appropriate refrigerator with temperature chart. e. Reagent and kits inside the refrigerator should be labelled and arranged in appropriate order as per expiry date. f. Adequate supply of blood bags g. Should have blood group and cross matching facilities. h. Blood collection beds i. Blood bank refrigerator is available with functioning temperature chart. j. Blood bags to be stored in an upright position inside the refrigerator and tray/drawer/shelf are labelled with blood grouping and in an appropriate order. k. Should have a handwashing facility, adequate waste bins, separate male and female washroom and infection control practice in place.

COMPONENT 12: INFECTION PREVENTION & CONTROL INCLUDING MEDICAL WASTE MANAGEMENT

Infection prevention and medical waste management (MWM) is paramount in health care facilities as it protects both patients and healthcare workers from diseases. Without controlling the spread of infection, hospitals would become unsafe.

Table 83: Infection Prevention and MWM at a Medical College Hospital

Infection Prevention & Control	
1. Cleanliness	a. The facility, equipment and supplies are kept clean and safe for clients/patients, visitors/attendants, and staff. b. Facility premises are free from litter and other refuse. c. Equipment, floors, and walls are free from body fluids, dust, spit, and grit. • Disinfectant and detergent should be used for cleaning the floor and wall as applicable. • Cleanliness shall always be maintained by washing and mopping with disinfectants. • Toilets should be cleaned using disinfectant and detergent as applicable. d. OT fumigation periodically and as necessary e. Use of sterile instruments, gauge, bandage f. Use of chlorine solution for disinfection g. Bed linen is changed of the blood collection beds after every blood donation. h. Staff inside the kitchen wear aprons and caps at all times
2. Hygiene	a. Availability of running water supply, soap, alcohol-based hand disinfectant, tissue, sanitizer in all OPD/Emergency/IPD Consultation rooms b. Regular handwashing with soap and/or use of sanitizers c. In the operation theatre, the handwashing facility should have an elbow tap, handwashing surgical scraps, handwashing brush along with running water and liquid soap.
3. Guidelines	a. Guidelines for standard hand washing and infection prevention procedures should be displayed b. Written and dated organization wide infection control policies and procedures are to be used by staff. Procedures include, but are not limited to, the following topics: • Use of standard precautions including handwashing techniques • Sterilization and decontamination of equipment – • Food hygiene • Laundry and linen management • Collection, storage and disposal of infectious waste, body fluids, tissues, blood, and blood products • Disposal of sharps and needles • Cleaning of all hospital surfaces supplies and equipment, e.g., floor, walls, ceilings, beds, and basins. • Management and cleaning of spillage • Vaccination of staff.

Table 83: Infection Prevention and MWM at a Medical College Hospital	
	c. Appropriate signage • Displayed Posters on importance of wearing masks and how to wear masks. • Displayed Posters/measures instituted for maintaining social distancing (1 meter) in any queue. • Displayed Poster for "No mask, No services." • Displayed Posters to maintain cough/respiratory etiquette. • Displayed Poster to do hand wash/hand hygiene. • Availability of Hand hygiene supplies (e.g., 70% alcohol-based hand sanitizers) d. Action to be taken in the event of an infection emergency is known to all staff and is clearly stated in writing. e. Staff are offered immunizations relevant to their type of work and emergency immunizations based on written policies
4. Protective Equipment	a. Availability of face mask, hand gloves b. Regular use of face mask and hand gloves by the service providers c. Visitors to the ICU and CCU, should wear disposable gown, mask, cap, shoe cap or ICU/CCU shoes[130] d. Use of PPE, gloves, mask and eye protector inside laboratory facilities, blood transfusion unit. In the OT, those entering should wear a clean OT gown. e. Appropriate equipment is used for the safe handling of hazardous materials.
5. Disposal	a. Safe final disposal of medical waste in accordance with the Medical Waste (Management and Processes) Rules 2008 b. Use of auto disposable syringes and needles and disposing them appropriately with medical waste
Medical Waste Management (MWM)	
1. Guidelines	**a.** The Medical College Hospital should have a documented waste disposal strategy specifying protocols, responsibilities, a schedule for waste collection, and list of necessary equipment (e.g., waste bins and bags). b. A clear guide for waste segregation and storage to be visibly posted in area(s) where medical waste is generated. • This should include waste segregation in clearly labelled coded bins in accordance with the Medical Waste (Management and Processes) Rules 2008. • IEC materials promoting awareness campaign on medical waste management to be displayed at the facilities for both service providers and recipients
2. Capacity Building	a. Periodic capacity building needed for staff handling infectious waste on hazards of waste, management of waste and infection control.
3. Maintenance and Logistics	a. All waste must be protected from theft, vandalism or scavenging by persons or animals. b. Waste to be segregated at its origin. c. Different color-coded bins to be available in sufficient numbers.

[130] Shoes kept solely for use in CCU and ICU by hospital.

Table 83: Infection Prevention and MWM at a Medical College Hospital	
	d. Medical waste should be correctly and appropriately disposed of as per the protocol (details in Table 84)

Table 84: Medical Waste Management Protocol at a Medical College Hospital		
Segregation of wastes at source of origin into:	**Coloured bins:**	**Disposing off method**
1. Non-hazardous, general waste	Black	Burn and/or Burry (in a separate pit[131] than the infectious, hazardous one) or provide to the City Corporation/Municipality for general waste management
2. Non-hazardous with recycled items	Green	Recycle. May be given to the City Corporation/Municipality
3. Hazardous, Infectious waste	Yellow	Burn and/or bury (in a pre-prepared pit[132])
4. Hazardous, Sharp waste	Red	Bury in a separate pit[133]
5. Hazardous, Infectious liquid waste	Blue	Add disinfectant and keep it for 30 minutes and then throw it down the drain.

[131] Floor of the waste pit should not be covered with concrete or any other means.
[132] Floor of the waste pit should not be covered with concrete or any other means.
[133] Floor of the waste pit should not be covered with concrete or any other means.

COMPONENT 13: MANAGEMENT

Table 85: Management of Medical College Hospital
1. Medical College Hospitals are controlled by the Director, Hospitals and Clinics of the DGHS
2. The Director is in-charge of the respective MCH
3. MC Hospitals human resources are deployed by the DGHS/MOHFW
4. MC Hospitals receive allocation for MSR, diet and other expenditure from the revenue budget and from Hospital Services Management (HSM) operational plan for development budget
5. MC Hospitals procure MSR, diet services and incur other expenditures.
6. Citizens Charter is displayed in open spaces.
7. Maintenance of Client/Patient and other Registers as mandated by the DGHS
8. Grievance Redress[134] mechanism is in place.
9. Patients' Welfare Fund available for the poor, operated by the Social Welfare Officer
10. The Health Service Improvement Committee is headed by the Member of Parliament (MP).
11. Biometric machine for attendance is easily accessible and functional.
• Time and date are updated.
• Uninterrupted electric power available
• All staff are registered.
• Print out is available on spot
12. Display board with information on available medicine list to be present.
13. Separate queues for registration (ticket counter) available
• Male & female
• Senior citizens (elderly)
14. Available standard treatment protocols (for identified cases) to be followed strictly

[134] Grievance Redress is the feed-back loop, technique used in management. Patients, clients, attendants, visitors coming in contact with the hospital may have grievance out of the services received and/or interactions with the service providers or other staff. For redress they may want to inform their grievance to the authority. A popular grievance redress mechanism is to place a complain box in a prominent place of a hospital with the notification of inviting complains, if have to deposit in the box. Periodically (weekly or fortnightly) the authority opens the box, review the complains, take remedial measures where possible and display in a board the complains received with authority's response including remedial measures. DGHS call center 16263 also function as grievance redress for all the facilities under DGHS

COMPONENT 14: HEALTH AND SAFETY

This component is designated to protect the health and safety of clients/patients, staffs and visitors and allow the service delivery to be safe, accessible and respect clients'/patients' need for privacy.

Table 86: Health and Safety Requirements at a Medical College Hospital	
1. Policies	a. Health and safety policies, procedures and standard protocols are available, displayed and followed by staff to: • Ensure health and safety of patients, staff and visitors are protected. • Ensure service delivery to be safe, accessible and respect clients'/patients' need for privacy. • Prevent contamination incidents related to health care waste. • Follow a sharps and needle-stick injuries (NSI) reporting system, with proper segregation and disposal of sharps. • Provide basic life support b. Current and relevant hazard notices and safety action bulletins are displayed to keep patients, staff and visitors informed.
2. Vaccination	a. Ensure appropriate vaccination for the staff of the hospital
3. Fire Safety	a. Availability of firefighting equipment with regular check for expiry dates (foam fire extinguisher, CO_2 fire extinguisher, dry powder fire extinguisher, tire blanket) b. Trained staff who conduct periodic mock drills. c. Selection of fire wardens from staff of different shifts of different categories • regular periodic drill by the fire wardens d. Installation of oxygen indicator machine in key install points (OT, medicine ward, ICU, CCU, etc.) e. The hospital building, e.g., doors, exits and corridors, is constructed in a way to minimize the risk of fire and conform to fire safety rules, including: • doorways, corridors, ramps, and stairways being wide enough for the evacuation of non-ambulatory clients/patients. • fire and smoke doors being able to be open and close manually or by an electric release system. • doors to client/patient rooms and exit doors are not locked from the inside. • pictogram indicating fire exists and escape are properly illuminated, clearly visible, unobstructed and are displayed at appropriate locations. • areas where smoking is dangerous, restricted, and allowed are clearly signed and monitored. • access and exit ways are always kept free of obstruction to allow for safe evacuation in a fire or other emergency. f. The local fire service and civil defence office should conduct an annual inspection of the hospital's fire safety, which identifies fire hazards and develops plans to reduce risks. g. Potentially explosive, flammable, or highly combustible material are clearly identified, securely stored and storage areas are clearly signed.

Table 86: Health and Safety Requirements at a Medical College Hospital	
4. Storage	a. Chemicals, medicine, and equipment are stored safely, as per protocols
5. Protection	a. Staff are provided with and use protective equipment, e.g., gloves, aprons, masks for safe handling of hazardous material. b. Staff are provided with appropriate vaccination like hepatitis B, COVID 19 etc.
6. Surveillance Camera (CCTV) Systems	a. Surveillance camera (CCTV) systems installed both inside and outside the facility to ensure: • the safety and security of service providers, and patients, and • prevent the theft of medicine and equipment. b. Recording should be preserved for a minimum of one year.

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কর্মশালার নোটিশ

আগামী ১৬/০৭/২০২৩ইং রোজ রবিবার দুপুর ০২:০০ ঘটিকায় স্বাস্থ্য অধিদপ্তরের নতুন ভবনের মিনি কনফারেন্স রুমে "National Health Services Standard Development (NHSSD) for Bangladesh" প্রনয়নের লক্ষ্যে গঠিত Technical Advisory Committee (TAC)-র একটি কর্মশালা আহবান করা হয়েছে। উক্ত কর্মশালায় **অধ্যাপক ডাঃ আহমেদুল কবীর, অতিরিক্ত মহাপরিচালক (পরিকল্পনা ও উন্নয়ন), স্বাস্থ্য অধিদপ্তর** প্রধান অতিথি হিসেবে উপস্থিত থাকবেন।
উক্ত কর্মশালায় "National Health Services Standard Development for Bangladesh" এর Technical Advisory Committee-র সকল সদস্যকে উপস্থিত থাকার জন্য বিশেষভাবে অনুরোধ করা হল।

সংযুক্তি: Technical Advisory Committee (TAC)-র
সদস্যগণের তালিকা (০১ পৃষ্ঠা)।

12/7/2023
(ডাঃ আফরিনা মাহমুদ)
পরিচালক
পরিকল্পনা ও গবেষণা
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বিতরণ (জ্যেষ্ঠতার ক্রমানুসারে নয়):

১. অতিরিক্ত সচিব, (পরিকল্পনা অনুবিভাগ), স্বাস্থ্য সেবা বিভাগ। (একজন উপযুক্ত প্রতিনিধি প্রেরণের অনুরোধসহ)।
২. অতিরিক্ত সচিব, (হাসপাতাল অনুবিভাগ), স্বাস্থ্য সেবা বিভাগ। (একজন উপযুক্ত প্রতিনিধি প্রেরণের অনুরোধসহ)।
৩. মহাপরিচালক, নার্সিং ও মিডওয়াইফারি অধিদপ্তর। (একজন উপযুক্ত প্রতিনিধি প্রেরণের অনুরোধসহ)।
৪. অতিরিক্ত মহাপরিচালক (পরিকল্পনা ও উন্নয়ন), স্বাস্থ্য অধিদপ্তর।
৫. অধ্যাপক ডা. এম এ ফয়েজ, সাবেক মহাপরিচালক, স্বাস্থ্য অধিদপ্তর।
৬. পরিচালক (পিএইচসি), স্বাস্থ্য অধিদপ্তর।
৭. পরিচালক (এমআইএস), স্বাস্থ্য অধিদপ্তর।
৮. পরিচালক (হাসপাতাল ও ক্লিনিক), স্বাস্থ্য অধিদপ্তর।
৯. লাইন ডাইরেক্টর (এনসিডিসি), স্বাস্থ্য অধিদপ্তর।
১০. লাইন ডাইরেক্টর (এইচএসএম), স্বাস্থ্য অধিদপ্তর।
১১. লাইন ডাইরেক্টর (ইউএইচসি), স্বাস্থ্য অধিদপ্তর।
১২. লাইন ডাইরেক্টর (সিবিএইচসি), স্বাস্থ্য অধিদপ্তর।
১৩. উপ-পরিচালক (পরিকল্পনা ও গবেষণা), স্বাস্থ্য অধিদপ্তর।
১৪. উপ-পরিচালক (প্রশাসন), স্বাস্থ্য অধিদপ্তর।
১৫. সহকারি পরিচালক (পরিকল্পনা), পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।
১৬. ডা. এহেছান উল্লাহ সিকদার, গবেষণা কর্মকর্তা, পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।
১৭. সভাপতি/সেক্রেটারি, বাংলাদেশ সোসাইটি অফ মেডিসিন।
১৮. সভাপতি/সেক্রেটারি, সোসাইটি অফ সার্জনস বাংলাদেশ।

১৯. সভাপতি/সেক্রেটারি, অবস্ এন্ড গাইনিকোলজিক্যাল সোসাইটি অফ বাংলাদেশ (ওজিএসবি)।
২০. সভাপতি/সেক্রেটারি, বাংলাদেশ পেডিয়াট্রিক্স এসোসিয়েশন।
২১. WHO Representative Bangladesh (WR) (০২ জন প্রতিনিধি মনোনয়নের অনুরোধসহ)।
২২. কনসালটেন্ট, ন্যাশনাল হেলথ সার্ভিসেস স্ট্যান্ডার্ড ডেভেলপমেন্ট ফর বাংলাদেশ।
২৩. ইনচার্জ, সম্মেলন কক্ষ (৩য় তলা), স্বাস্থ্য অধিদপ্তর (সভার প্রয়োজনীয় ব্যবস্থা গ্রহণের অনুরোধসহ)।
২৪. অফিস কপি।

অনুলিপি (জ্যেষ্ঠতার ক্রমানুসারে নয়):

১. মহাপরিচালক, স্বাস্থ্য অধিদপ্তর। (দৃ: আ: সহকারি পরিচালক (সমন্বয়), স্বাস্থ্য অধিদপ্তর)।
২. অতিরিক্ত মহাপরিচালক (প্রশাসন), স্বাস্থ্য অধিদপ্তর।
৩. অতিরিক্ত মহাপরিচালক (পরিকল্পনা ও উন্নয়ন), স্বাস্থ্য অধিদপ্তর।
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২২/০৭/২৬

ডা. এহেচান উল্লাহ সিকদার
গবেষণা কর্মকর্তা
পরিকল্পনা ও গবেষণা
স্বাস্থ্য অধিদপ্তর।

"National Health Services Standard Development for Bangladesh" প্রনয়নে গঠিত Technical Advisory Committee-র সদস্যগণের তালিকা:

১.	অতিরিক্ত মহাপরিচালক (পরিকল্পনা ও উন্নয়ন), স্বাস্থ্য অধিদপ্তর।	**সভাপতি**
২.	পরিচালক (পরিকল্পনা ও গবেষণা), স্বাস্থ্য অধিদপ্তর।	**সহ-সভাপতি**
৩.	অধ্যাপক ডা. এম এ ফয়েজ, সাবেক মহাপরিচালক, স্বাস্থ্য অধিদপ্তর।	সদস্য
৪.	পরিচালক (পিএইচসি), স্বাস্থ্য অধিদপ্তর।	সদস্য
৫.	পরিচালক (এমআইএস), স্বাস্থ্য অধিদপ্তর।	সদস্য
৬.	পরিচালক (হাসপাতাল ও ক্লিনিক), স্বাস্থ্য অধিদপ্তর।	সদস্য
৭.	লাইন ডাইরেক্টর (এনসিডিসি), স্বাস্থ্য অধিদপ্তর।	সদস্য
৮.	লাইন ডাইরেক্টর (এইচএসএম), স্বাস্থ্য অধিদপ্তর।	সদস্য
৯.	লাইন ডাইরেক্টর (ইউএইচসি), স্বাস্থ্য অধিদপ্তর।	সদস্য
১০.	লাইন ডাইরেক্টর (সিবিএইচসি), স্বাস্থ্য অধিদপ্তর।	সদস্য
১১.	প্রতিনিধি, (পরিকল্পনা অনুবিভাগ), স্বাস্থ্য সেবা বিভাগ। (একজন)	সদস্য
১২.	প্রতিনিধি, (হাসপাতাল অনুবিভাগ), স্বাস্থ্য সেবা বিভাগ। (একজন)	সদস্য
১৩.	প্রতিনিধি, নার্সিং ও মিডওয়াইফারি অধিদপ্তর। (একজন)	সদস্য
১৪.	উপ-পরিচালক (পরিকল্পনা ও গবেষণা), স্বাস্থ্য অধিদপ্তর।	সদস্য
১৫.	উপ-পরিচালক (প্রশাসন), স্বাস্থ্য অধিদপ্তর।	সদস্য
১৬.	সভাপতি/সেক্রেটারি, বাংলাদেশ সোসাইটি অফ মেডিসিন।	সদস্য
১৭.	সভাপতি/সেক্রেটারি, সোসাইটি অফ সার্জনস বাংলাদেশ।	সদস্য
১৮.	সভাপতি/সেক্রেটারি, অবস্ এন্ড গাইনিকোলজিক্যাল সোসাইটি অফ বাংলাদেশ (ওজিএসবি)।	সদস্য
১৯.	সভাপতি/সেক্রেটারি, বাংলাদেশ পেডিয়াট্রিক্স এসোসিয়েশন।	সদস্য
২০.	প্রতিনিধি, বিশ্ব স্বাস্থ্য সংস্থা (০২ জন)	সদস্য
২১.	ডা. এহেছান উল্লাহ সিকদার, গবেষণা কর্মকর্তা , পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।	সদস্য
২২.	সহকারি পরিচালক (পরিকল্পনা), স্বাস্থ্য অধিদপ্তর।	**সদস্য সচিব**

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
স্বাস্থ্য অধিদপ্তর
পরিকল্পনা ও গবেষণা
ঢাকা, বাংলাদেশ।
www.dghs.gov.bd

স্মারক নম্বর- স্বাঃ অধিঃ/পঃ ও গবেঃ/WHO/NHSSD/১৪৬/২০২৩/ ৩৯৫ তারিখ: ২৬/০৭/২০২৩ ইং

অফিস আদেশ

স্বাস্থ্য অধিদপ্তরের পরিকল্পনা ও গবেষণা শাখা এবং বিশ্ব স্বাস্থ্য সংস্থা (WHO) এর উদ্যোগে "National Health Services Standard Development for Bangladesh" প্রনয়নের লক্ষ্যে যথাযথ কর্তৃপক্ষের অনুমোদনক্রমে একটি Working Committee গঠন করা হয়েছে।

"National Health Services Standard Development for Bangladesh" প্রনয়নে গঠিত Working Committee-র সদস্যগণের তালিকা (জ্যেষ্ঠতার ক্রমানুসারে নয়) নিম্নরূপ:

১. ডা. আফরিনা মাহমুদ, পরিচালক (পরিকল্পনা ও গবেষণা), স্বাস্থ্য অধিদপ্তর।
২. ডা. মীর মোবারক হোসেন, উপ-পরিচালক (পরিকল্পনা ও গবেষণা), স্বাস্থ্য অধিদপ্তর।
৩. ডা. আবু হোসেন মোঃ মইনুল আহসান, উপ-পরিচালক (হাসপাতাল), স্বাস্থ্য অধিদপ্তর।
৪. ডা. আবদুল আলীম, সহকারী পরিচালক (পরিকল্পনা), স্বাস্থ্য অধিদপ্তর।
৫. ডা. আবুল ফজল মোঃ শাহাবুদ্দিন খান, সিভিল সার্জন, ঢাকা।
৬. ডা. আবু সৈয়দ মোহাম্মদ ইমতিয়াজ হোসেন, সহকারী পরিচালক (সমন্বয়), স্বাস্থ্য অধিদপ্তর।
৭. ডা. মোঃ জাহাঙ্গীর আলম, সুপারিনটেনডেন্ট (সহকারী পরিচালক), শহীদ আহসান উল্লাহ মাস্টার জেনারেল হাসপাতাল, টঙ্গী।
৮. ডা. উম্মে রুমান সিদ্দিকী, সহকারী পরিচালক, পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।
৯. ডা. আরাফাতুর রহমান, উপজেলা স্বাস্থ্য ও প: প: কর্মকর্তা, কেরানীগঞ্জ, ঢাকা।
১০. ডা. মুহাম্মদ আনোয়ার সাদাত, ডেপুটি প্রোগ্রাম ম্যানেজার (সমন্বয়), পিএমআর ওপি, স্বাস্থ্য অধিদপ্তর।
১১. ডা. মোহাম্মদ হারুন উর রশিদ, প্রোগ্রাম ম্যানেজার, পিএমআর ওপি, স্বাস্থ্য অধিদপ্তর।
১২. ডা. আসিফ মাহমুদ, ডেপুটি প্রোগ্রাম ম্যানেজার, সিবিএইচসি ওপি, স্বাস্থ্য অধিদপ্তর।
১৩. ডা. আশিকুর রহমান, ডেপুটি প্রোগ্রাম ম্যানেজার, ইউএইচসি ওপি, স্বাস্থ্য অধিদপ্তর।
১৪. ডা. তানভীর আহমেদ, ডেপুটি প্রোগ্রাম ম্যানেজার (এইচআরএম), স্বাস্থ্য অধিদপ্তর।
১৫. ডা. আবু সাঈদ চৌধুরী, জুনিয়র কনসালটেন্ট, মুগদা মেডিকেল কলেজ, ঢাকা।
১৬. ডা. মণনি মাওলা, সহযোগী অধ্যাপক, মেডিসিন বিভাগ, ঢাকা মেডিকেল কলেজ।
১৭. ডা. ফাহমিদ উজ জামান, মেডিকেল অফিসার, সার্জারি বিভাগ, ঢাকা মেডিকেল কলেজ হাসপাতাল।
১৮. ডা. এ.এস.এম ফরহাদ-উল-হাসান, জুনিয়র কনসালটেন্ট, সার্জারি বিভাগ, শহীদ সোহরাওয়ার্দী মেডিকেল কলেজ, ঢাকা।
১৯. ডা. মোহাম্মদ আশরাফুল আলম, সহকারী অধ্যাপক, কার্ডিওলজি, এনআইসিভিডি, ঢাকা।
২০. ডা. এ বি এম সারওয়ার জাহান, কনসালটেন্ট অ্যানেস্থেসিওলজিস্ট, অ্যানেস্থেশিয়া, অ্যানালজেসিয়া এবং আইসিইউ বিভাগ, বিএসএমএমইউ এবং যুগ্ম সচিব, বিএসএ সিসি পিপি।
২১. অধ্যাপক ডা. ইফফাত আরা, ইসি সদস্য-ওজিএসবি
২২. ডা. ফারজানা দীবা, প্রকাশনা সম্পাদক-ওজিএসবি।
২৩. ডা. ইসরাত জাহান উম্মন, ডিপিএম, এইচএসএম ওপি, স্বাস্থ্য অধিদপ্তর।
২৪. ডা. বি.এম. রিয়াজুল ইসলাম, ডেপুটি চিফ (মেডিকেল), এমআইএস, স্বাস্থ্য অধিদপ্তর।

২৫. ডা. এহেছান উল্লাহ সিকদার, গবেষণা কর্মকর্তা, পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।
২৬. ডা. মোঃ সাইফুল ইসলাম, মেডিকেল অফিসার, পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।
২৭. ডা. জেড এম তানভীর সুবাহ, মেডিকেল অফিসার, পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।

গঠিত Working Committee-র কার্যপরিধি:

- স্বাস্থ্যখাতের প্রতিটি ধাপ এর স্বাস্থ্য প্রতিষ্ঠানসমূহের ক্লিনিক্যাল সার্ভিস/ডায়াগনস্টিক সার্ভিস প্রদানের পরিধি/স্ট্যান্ডার্ড নির্ধারণ করবেন।
- স্বাস্থ্যখাতের প্রতিটি ধাপ এর স্বাস্থ্য প্রতিষ্ঠানসমূহের ভৌত অবকাঠামো, জনবল কাঠামো, প্রয়োজনীয় ঔষধপত্র, যন্ত্রপাতি, লজিস্টিক সাপোর্টের স্ট্যান্ডার্ড নির্ধারণ করবেন।
- Working Committee প্রয়োজনে সদস্য কো-অপ্ট করতে পারবেন।

26/7/23
ডা. আবদুল আলীম
সহকারী পরিচালক (পরিকল্পনা)
পরিকল্পনা ও গবেষণা
ও
সদস্য সচিব, এনএইচএসএসডি
Email: rd@ld.dghs.gov.bd

বিতরণ (জ্যেষ্ঠতার ক্রমানুসারে নয়):

১. ডা. আফরিনা মাহমুদ, পরিচালক (পরিকল্পনা ও গবেষণা), স্বাস্থ্য অধিদপ্তর।
২. ডা. মীর মোবারক হোসেন, উপ-পরিচালক (পরিকল্পনা ও গবেষণা), স্বাস্থ্য অধিদপ্তর।
৩. ডা. আবু হোসেন মোঃ মইনুল আহসান, উপ-পরিচালক (হাসপাতাল), স্বাস্থ্য অধিদপ্তর।
৪. ডা. আবুল ফজল মোঃ শাহাবুদ্দিন খান, সিভিল সার্জন, ঢাকা।
৫. ডা. আবু সৈয়দ মোহাম্মদ ইমতিয়াজ হোসেন, সহকারী পরিচালক (সমন্বয়), স্বাস্থ্য অধিদপ্তর।
৬. ডা. মোঃ জাহাঙ্গীর আলম, সুপারিনটেনডেন্ট (সহকারী পরিচালক), শহীদ এ.এইচ.এম উল্লাহ মাস্টার জেনারেল হাসপাতাল, টঙ্গী।
৭. ডা. উম্মে রুমান সিদ্দিকী, সহকারী পরিচালক, পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।
৮. ডা. মো: আরাফাতুর রহমান, উপজেলা স্বাস্থ্য ও প: প: কর্মকর্তা, কেরানীগঞ্জ, ঢাকা।
৯. ডা. মুহাম্মদ আনোয়ার সাদাত, ডেপুটি প্রোগ্রাম ম্যানেজার (সমন্বয়), পিএমআর ওপি, স্বাস্থ্য অধিদপ্তর।
১০. ডা. মোহাম্মদ হারুন উর রশিদ, প্রোগ্রাম ম্যানেজার, পিএমআর ওপি, স্বাস্থ্য অধিদপ্তর।
১১. ডা. আসিফ মাহমুদ, ডেপুটি প্রোগ্রাম ম্যানেজার, সিঞ্চিএইচসি ওপি, স্বাস্থ্য অধিদপ্তর।
১২. ডা. আশিকুর রহমান, ডেপুটি প্রোগ্রাম ম্যানেজার, ইউএইচসি ওপি, স্বাস্থ্য অধিদপ্তর।
১৩. ডা. তানভীর আহমেদ, ডেপুটি প্রোগ্রাম ম্যানেজার (এইচআরএম), স্বাস্থ্য অধিদপ্তর।
১৪. ডা. আবু সাঈদ চৌধুরী, জুনিয়র কনসালটেন্ট, মুগদা মেডিকেল কলেজ, ঢাকা।
১৫. ডা. মণনি মাওলা, সহযোগী অধ্যাপক, মেডিসিন বিভাগ, ঢাকা মেডিকেল কলেজ।
১৬. ডা. ফাহমিদ উজ জামান, মেডিকেল অফিসার, সার্জারি বিভাগ, ঢাকা মেডিকেল কলেজ হাসপাতাল।
১৭. ডা. এ.এস.এম ফরহাদ-উল-হাসান, জুনিয়র কনসালটেন্ট, সার্জারি বিভাগ, শহীদ সোহরাওয়ার্দী মেডিকেল কলেজ, ঢাকা।
১৮. ডা. মোহাম্মদ আশরাফুল আলম, সহকারী অধ্যাপক, কার্ডিওলজি, এনআইসিভিডি, ঢাকা।
১৯. ডা. এ বি এম সারওয়ার জাহান, কনসালটেন্ট অ্যানেস্থেসিওলজিস্ট, অ্যানেস্থেশিয়া, অ্যানালজেসিয়া এবং আইসিইউ বিভাগ, ঝিএসএমএমইউ এবং যুগ্ম সচিব, ঝিএসএসি সিপিপি।

২০. অধ্যাপক ডা. ইফফাত আরা, ইসি সদস্য-ওজিএসবি।
২১. ডা. ফারজানা দীবা, প্রকাশনা সম্পাদক-ওজিএসবি
২২. ডা. ইসরাত জাহান উম্মন, ডিপিএম, এইচএসএম ওপি, স্বাস্থ্য অধিদপ্তর।
২৩. ডা. বি.এম. রিয়াজুল ইসলাম, ডেপুটি চিফ (মেডিকেল), এমআইএস, স্বাস্থ্য অধিদপ্তর।
২৪. ডা. এহেছান উল্লাহ সিকদার, গবেষণা কর্মকর্তা, পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।
২৫. ডা. মোঃ সাইফুল ইসলাম, মেডিকেল অফিসার, পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর
২৬. ডা. জেড এম তানভীর সুবাহ, মেডিকেল অফিসার, পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর
২৭. অফিস কপি।

অনুলিপি (জ্যেষ্ঠতার ক্রমানুসারে নয়):

১. মহাপরিচালক, স্বাস্থ্য অধিদপ্তর। (দৃ: আ: সহকারি পরিচালক (সমন্বয়), স্বাস্থ্য অধিদপ্তর)।
২. অতিরিক্ত মহাপরিচালক (পরিকল্পনা ও উন্নয়ন), স্বাস্থ্য অধিদপ্তর। (দৃ: আ: সহকারি পরিচালক (প্রকল্প সমন্বয়), স্বাস্থ্য অধিদপ্তর)।
৩. WHO Representative Bangladesh (WR)
৪. সভাপতি/সেক্রেটারি, বাংলাদেশ সোসাইটি অফ মেডিসিন।
৫. সভাপতি/সেক্রেটারি, সোসাইটি অফ সার্জনস বাংলাদেশ।
৬. সভাপতি/সেক্রেটারি, অবস্ এন্ড গাইনিকোলজিক্যাল সোসাইটি অফ বাংলাদেশ (ওজিএসবি)।
৭. সভাপতি/সেক্রেটারি, বাংলাদেশ পেডিয়াট্রিক্স এসোসিয়েশন।
৮. প্রেসিডেন্ট/সেক্রেটারি, বিএসএ-সিসিপিপি।

ডা. এহেছান উল্লাহ সিকদার
গবেষণা কর্মকর্তা
পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।
ই-মেইল: au.sikder.1@gmail.com

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স্বাস্থ্য অধিদপ্তর
পরিকল্পনা ও গবেষণা
ঢাকা, বাংলাদেশ।
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স্মারক নম্বর- স্বাঃ অধিঃ/পঃ ও গবেঃ/WHO/NHSSD/১৪৬/২০২৩/ ৩৭৬ তারিখ: ২৭/০৭/২০২৩ ইং

অফিস আদেশ

আগামী ৩১/০৭/২০২৩ইং রোজ সোমবার সকাল ০৯:৩০ ঘটিকায় BRAC Inn (Meeting Room), ব্র্যাক সেন্টার, ৭৫, মহাখালী, ঢাকা-১২১২ ভেন্যুতে স্বাস্থ্য অধিদপ্তরের পরিকল্পনা ও গবেষণা শাখা এবং বিশ্ব স্বাস্থ্য সংস্থা (WHO) এর উদ্যোগে "National Health Services Standard Development for Bangladesh" প্রনয়নের লক্ষ্যে গঠিত Working Committee-র প্রথম কর্মশালা আহবান করা হয়েছে। উক্ত কর্মশালায় অধ্যাপক ডাঃ আহমেদুল কবীর, অতিরিক্ত মহাপরিচালক (পরিকল্পনা ও উন্নয়ন), স্বাস্থ্য অধিদপ্তর মহোদয় প্রধান অতিথি হিসেবে উপস্থিত থাকবেন।
উক্ত কর্মশালায় "National Health Services Standard Development for Bangladesh" এর Working Committee -র সকল সদস্যকে উপস্থিত থাকার জন্য বিশেষভাবে অনুরোধ করা হল।

ভেন্যুঃ BRAC Inn (Meeting Room), ব্র্যাক সেন্টার, ৭৫, মহাখালী।

তারিখ: ৩১/০৭/২০২৩ইং রোজ সোমবার।

সময়: সকাল ০৯:৩০ ঘটিকা হতে দুপুর ০২:০০ ঘটিকা পর্যন্ত।

২৭/৭/২৩
ডা. আবদুল আলীম
সহকারী পরিচালক (পরিকল্পনা)
পরিকল্পনা ও গবেষণা
ও
সদস্য সচিব, এনএইচএসএসডি
Email: rd@ld.dghs.gov.bd

বিতরণ (জ্যেষ্ঠতার ক্রমানুসারে নয়):

১. ডা. আফরিনা মাহমুদ, পরিচালক (পরিকল্পনা ও গবেষণা), স্বাস্থ্য অধিদপ্তর।
২. ডা. মীর মোবারক হোসেন, উপ-পরিচালক (পরিকল্পনা ও গবেষণা), স্বাস্থ্য অধিদপ্তর।
৩. ডা. আবু হোসেন মোঃ মইনুল আহসান, উপ-পরিচালক (হাসপাতাল), স্বাস্থ্য অধিদপ্তর।
৪. ডা. আবুল ফজল মোঃ শাহাবুদ্দিন খান, সিভিল সার্জন, ঢাকা।
৫. ডা. আবু সৈয়দ মোহাম্মদ ইমতিয়াজ হোসেন, সহকারী পরিচালক (সমন্বয়), স্বাস্থ্য অধিদপ্তর।
৬. ডা. মোঃ জাহাঙ্গীর আলম, সুপারিনটেনডেন্ট (সহকারী পরিচালক), শহীদ আহসান উল্লাহ মাস্টার জেনারেল হাসপাতাল, টঙ্গী।
৭. ডা. মোহাম্মদ হারুন উর রশিদ, প্রোগ্রাম ম্যানেজার, পিএমআর ওপি, স্বাস্থ্য অধিদপ্তর।
৮. ডা. উম্মে রুমান সিদ্দিকী, সহকারী পরিচালক, পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।
৯. ডা. মো: আরাফাতুর রহমান, উপজেলা স্বাস্থ্য ও প: প: কর্মকর্তা, কেরানীগঞ্জ, ঢাকা।
১০. ডা. মুহাম্মদ আনোয়ার সাদাত, ডেপুটি প্রোগ্রাম ম্যানেজার (সমন্বয়), পিএমআর ওপি, স্বাস্থ্য অধিদপ্তর।
১১. ডা. আসিফ মাহমুদ, ডেপুটি প্রোগ্রাম ম্যানেজার, সিবিএইচসি ওপি, স্বাস্থ্য অধিদপ্তর।
১২. ডা. আশিকুর রহমান, ডেপুটি প্রোগ্রাম ম্যানেজার, ইউএইচসি ওপি, স্বাস্থ্য অধিদপ্তর।
১৩. ডা. তানভীর আহমেদ, ডেপুটি প্রোগ্রাম ম্যানেজার (এইচআরএম), স্বাস্থ্য অধিদপ্তর।

১৪. ডা. অবু সাঈদ চৌধুরী, জুনিয়র কনসালটেন্ট, মুগদা মেডিকেল কলেজ, ঢাকা।
১৫. ডা. মণনি মাওলা, সহযোগী অধ্যাপক, মেডিসিন বিভাগ, ঢাকা মেডিকেল কলেজ।
১৬. ডা. ফাহমিদ উজ জামান, মেডিকেল অফিসার, সার্জারি বিভাগ, ঢাকা মেডিকেল কলেজ হাসপাতাল।
১৭. ডা. এ.এস.এম ফরহাদ-উল-হাসান, জুনিয়র কনসালটেন্ট, সার্জারি বিভাগ, শহীদ সোহরাওয়ার্দী মেডিকেল কলেজ, ঢাকা।
১৮. ডা. মোহাম্মদ আশরাফুল আলম, সহকারী অধ্যাপক, কার্ডিওলজি, এনআইসিভিডি, ঢাকা।
১৯. ডা. এ বি এম সারওয়ার জাহান, কনসালটেন্ট অ্যানেস্থেসিওলজিস্ট, অ্যানেস্থেশিয়া, অ্যানালজেসিয়া এবং আইসিইউ বিভাগ, বিএসএমএমইউ এবং যুগ্ম সচিব, বিএসএসি সিপিপি।
২০. অধ্যাপক ডা. ইফফাত আরা, ইসি সদস্য-ওজিএসবি।
২১. ডা. ফারজানা দীবা, প্রকাশনা সম্পাদক-ওজিএসবি।
২২. ডা. ইসরাত জাহান উম্মন, ডিপিএম, এইচএসএম ওপি, স্বাস্থ্য অধিদপ্তর।
২৩. ডা. বি.এম. রিয়াজুল ইসলাম, ডেপুটি চিফ (মেডিকেল), এমআইএস, স্বাস্থ্য অধিদপ্তর।
২৪. ডা. এহেছান উল্লাহ সিকদার, গবেষণা কর্মকর্তা, পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।
২৫. ডা. মোঃ সাইফুল ইসলাম, মেডিকেল অফিসার, পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।
২৬. ডা. জেড এম তানভীর সুবাহ, মেডিকেল অফিসার, পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।
২৭. অফিস কপি।

অনুলিপি (জ্যেষ্ঠতার ক্রমানুসারে নয়):

১. মহাপরিচালক, স্বাস্থ্য অধিদপ্তর। (দৃ: আ: সহকারি পরিচালক (সমন্বয়), স্বাস্থ্য অধিদপ্তর)।
২. অতিরিক্ত মহাপরিচালক (পরিকল্পনা ও উন্নয়ন), স্বাস্থ্য অধিদপ্তর। (দৃ: অ: সহকারি পরিচালক (প্রকল্প সমন্বয়), স্বাস্থ্য অধিদপ্তর)।
৩. WHO Representative Bangladesh (WR)
৪. সভাপতি/সেক্রেটারি, বাংলাদেশ সোসাইটি অফ মেডিসিন।
৫. সভাপতি/সেক্রেটারি, সোসাইটি অফ সার্জনস বাংলাদেশ।
৬. সভাপতি/সেক্রেটারি, অবস্ এন্ড গাইনিকোলজিক্যাল সোসাইটি অফ বাংলাদেশ (ওজিএসবি)।
৭. সভাপতি/সেক্রেটারি, বাংলাদেশ পেডিয়াট্রিক্স এসোসিয়েশন।
৮. প্রেসিডেন্ট/সেক্রেটারি, বিএসএ-সিসিপিপি।

ডা. এহেছান উল্লাহ সিকদার
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ই-মেইল: au.sikder.1@gmail.com

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পরিকল্পনা ও গবেষণা
স্বাস্থ্য অধিদপ্তর
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স্মারক নং- স্বা: অধি:/ পরি: ও গবে:/WHO/NHSSD/১৬১/২০২৩/ ৬১৭ তারিখ: ২৬/১০/২০২৩ ইং

কর্মশালার নোটিশ

আগামী ৩১/১০/২০২৩ইং রোজ মঙ্গলবার সকাল ০৯:৩০ টা থেকে ৩.০০ টা পর্যন্ত BRAC Inn (Conference Room), ব্র্যাক সেন্টার, ৭৫, মহাখালী, ঢাকা-১২১২ জেন্যাতে স্বাস্থ্য অধিদপ্তরের পরিকল্পনা ও গবেষণা শাখা এবং বিশ্ব স্বাস্থ্য সংস্থা (WHO) এর উদ্যোগে "National Health Services Standard Development for Bangladesh" প্রনয়নের লক্ষ্যে, Consultative workshop with stakeholders বিষয়ক কর্মশালার আহবান করা হয়েছে। উক্ত কর্মশালায় **অধ্যাপক ডা. আবুল বাসার মোহাম্মদ খুরশীদ আলম, মহাপরিচালক**, স্বাস্থ্য অধিদপ্তর মহোদয় প্রধান অতিথি হিসেবে উপস্থিত থাকবেন । উল্লিখিত কর্মশালায় সভাপতিত্ব করবেন ডা: **আফরিনা মাহমুদ**, পরিচালক (পরিকল্পনা ও গবেষণা) স্বাস্থ্য অধিদপ্তর।

উক্ত কর্মশালায় নিম্নে উল্লেখিত অংশগ্রহনকারীদের উপস্থিত থাকার জন্য বিশেষভাবে অনুরোধ করা হল।

জেন্যাঃ BRAC Inn (Conference Room), ব্র্যাক সেন্টার, ৭৫, মহাখালী।

তারিখ: ৩১/১০/২০২৩ইং রোজ মঙ্গলবার।

সময়: সকাল ০৯:৩০ ঘটিকা হতে দুপুর ০৩:০০ ঘটিকা পর্যন্ত।

26/10/23
ডা. আবদুল আলীম
সহকারী পরিচালক
(পরিকল্পনা ও গবেষণা)
ও
সদস্য সচিব, এনএইচএসএসটি
Email: rd@ld.dghs.gov.bd

অংশগ্রহনকারীদের তালিকা: (জ্যেষ্ঠতার ক্রমানুসারে নয়):

১. অতিরিক্ত সচিব, (পরিকল্পনা অনুবিভাগ), স্বাস্থ্য সেবা বিভাগ। (একজন উপযুক্ত প্রতিনিধি প্রেরণের অনুরোধসহ)।
২. অতিরিক্ত সচিব, (হাসপাতাল অনুবিভাগ), স্বাস্থ্য সেবা বিভাগ। (একজন উপযুক্ত প্রতিনিধি প্রেরণের অনুরোধসহ)।
৩. ডা. আফরিনা মাহমুদ, পরিচালক (পরিকল্পনা ও গবেষণা), স্বাস্থ্য অধিদপ্তর।
৪. অধ্যাপক ডা. এম এ ফয়েজ, সাবেক মহাপরিচালক, স্বাস্থ্য অধিদপ্তর।
৫. সভাপতি/ সেক্রেটারি, বাংলাদেশ সোসাইটি অফ মেডিসিন।
৬. সভাপতি/সেক্রেটারি, সোসাইটি অফ সার্জনস বাংলাদেশ।
৭. সভাপতি/সেক্রেটারি, অবস এন্ড গাইনিকোলজিক্যাল সোসাইটি অফ বাংলাদেশ (ওজিএসবি)।
৮. সভাপতি সেক্রেটারি, বাংলাদেশ পেডিয়াট্রিক্স এসোসিয়েশন।
৯. পরিচালক, (সিএইচসি), স্বাস্থ্য অধিদপ্তর।
১০. পরিচালক, ঢাকা মেডিকেল কলেজ হাসপাতাল।
১১. পরিচালক, (এমআইএস), স্বাস্থ্য অধিদপ্তর।
১২. পরিচালক, (হাসপাতাল ও ক্লিনিক), স্বাস্থ্য অধিদপ্তর।
১৩. লাইন ডাইরেক্টর (এনসিডিসি), স্বাস্থ্য অধিদপ্তর।
১৪. লাইন ডাইরেক্টর (এইচএসএম), স্বাস্থ্য অধিদপ্তর।
১৫. লাইন ডাইরেক্টর (ইউএইচসি), স্বাস্থ্য অধিদপ্তর।
১৬. লাইন ডাইরেক্টর (সিবিএইচসি), স্বাস্থ্য অধিদপ্তর।
১৭. ডাঃ জহিরুল হক চৌধুরী , অধ্যাপক (নিউরোলজি), এন আই এন এস
১৮. ডাঃ হুমায়ুন কবির, সহকারী অধ্যাপক, NITOR
১৯. ডাঃ মোঃ মাহবুব উল্লাহ, সহকারী অধ্যাপক, ইএনটি হাসপাতাল, ঢাকা।
২০. ডাঃ মোঃ জিল্লুর রহমান, সহযোগী অধ্যাপক, শহীদ সোহরওয়ার্দী মেডিকেল কলেজ
২১. ডাঃ মোঃ আশরাফুজ্জামান, কনসালটেন্ট , NICRH
২২. উপ-পরিচালক (পরিকল্পনা ও গবেষণা), স্বাস্থ্য অধিদপ্তর।

২৩. উপ-পরিচালক (প্রশাসন), স্বাস্থ্য অধিদপ্তর।
২৪. সহকারি পরিচালক (পরিকল্পনা), পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।
২৫. ডা. আবু হোসেন মোঃ মইনুল আহসান, উপ-পরিচালক (হাসপাতাল), স্বাস্থ্য অধিদপ্তর।
২৬. ডা. আবুল ফজল মোঃ শাহাবুদ্দিন খান, সিভিল সার্জন, ঢাকা।
২৭. ডা. আবু সৈয়দ মোহাম্মদ ইমতিয়াজ হোসেন, সহকারী পরিচালক (সমন্বয়), স্বাস্থ্য অধিদপ্তর।
২৮. ডা. মোঃ জাহাঙ্গীর আলম, সুপারিনটেনডেন্ট (সহকারী পরিচালক), শহীদ আহসান উল্লাহ মাস্টার জেনারেল হাসপাতাল, টঙ্গী।
২৯. ডা. মোহাম্মদ হারুন উর রশিদ, প্রোগ্রাম ম্যানেজার, পিএমআর ওপি, স্বাস্থ্য অধিদপ্তর।
৩০. ডা. উম্মে রুমান সিদ্দিকী, সহকারী পরিচালক, পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।
৩১. ডা. মো: আরাফাতুর রহমান, উপজেলা স্বাস্থ্য ও প: প: কর্মকর্তা, কেরানীগঞ্জ, ঢাকা।
৩২. ডা. মুহাম্মদ আনোয়ার সাদাত, ডেপুটি প্রোগ্রাম ম্যানেজার (সমন্বয়), পিএমআর ওপি, স্বাস্থ্য অধিদপ্তর।
৩৩. ডা. আসিফ মাহমুদ, ডেপুটি প্রোগ্রাম ম্যানেজার, সিবিএইচসি ওপি, স্বাস্থ্য অধিদপ্তর।
৩৪. ডা. আশিকুর রহমান, ডেপুটি প্রোগ্রাম ম্যানেজার, ইউএইচসি ওপি, স্বাস্থ্য অধিদপ্তর।
৩৫. ডা. তানভীর আহমেদ, ডেপুটি প্রোগ্রাম ম্যানেজার (এইচআরএম), স্বাস্থ্য অধিদপ্তর।
৩৬. ডা. আবু সাঈদ চৌধুরী, সিনিয়র কনসালটেন্ট, মুগদা মেডিকেল কলেজ, ঢাকা।
৩৭. ডা. মগমি মাওলা, সহযোগী অধ্যাপক, মেডিসিন বিভাগ, ঢাকা মেডিকেল কলেজ।
৩৮. ডা. এ.এস.এম ফরহাদ-উল-হাসান, জুনিয়র কনসালটেন্ট, সার্জারি বিভাগ, শহীদ সোহরাওয়ার্দী মেডিকেল কলেজ, ঢাকা।
৩৯. ডা. মোহাম্মদ আশরাফুল আলম, সহকারী অধ্যাপক, কার্ডিওলজি, এনআইসিভিডি, ঢাকা।
৪০. ডা. এ বি এম সারওয়ার জাহান, কনসালটেন্ট অ্যানেস্থেসিওলজিস্ট, অ্যানেস্থেশিয়া, অ্যানালজেসিয়া এবং আইসিইউ বিভাগ, বিএসএমএমইউ এবং যুগ্ম সচিব, বিএসএসি সিপিপি।
৪১. অধ্যাপক ডা. ইফফাত আরা, ইসি সদস্য-ওজিএসবি।
৪২. ডা. ফারজানা দীবা, প্রকাশনা সম্পাদক- ওজিএসবি।
৪৩. সহকারী পরিচালক (প্রকল্প সমন্বয়), স্বাস্থ্য অধিদপ্তর।
৪৪. সহকারি পরিচালক (সকল), পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।
৪৫. ডাঃ মোঃ বাদরুল আলম, সিনিয়র কনসালটেন্ট, NITOR
৪৬. ডাঃ গোলাম মুসফিকুর, SDPP, NIO
৪৭. মেডিকেল অফিসার (সকল), পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।
৪৮. ডা: মুরাদ সুলতান , NPO, WHO
৪৯. মি. পল্লব ভাট, টেকনিক্যাল অফিসার, WHO
৫০. আমিনুল ইসলাম, ন্যাশনাল কনসালটেন্ট, WHO
৫১. প্রতিনিধি, Oxford Policy Management

অনুলিপি (জ্যেষ্ঠতার ক্রমানুসারে নয়):

১. মহাপরিচালক, স্বাস্থ্য অধিদপ্তর, মহাখালী ।
২. অতিরিক্ত মহাপরিচালক (পরিকল্পনা ও উন্নয়ন), স্বাস্থ্য অধিদপ্তর, মহাখালী।
৩. পরিচালক, পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর, মহাখালী।
৪. পরিচালক (প্রশাসন), স্বাস্থ্য অধিদপ্তর, মহাখালী।
৫. পরিচালক, NITOR, ঢাকা।
৬. পরিচালক, NINS, ঢাকা।
৭. পরিচালক, NIO, ঢাকা।
৮. পরিচালক, NICRH, ঢাকা।
৯. পরিচালক, NICVD, ঢাকা।
১০. পরিচালক, মুগদা মেডিকেল কলেজ, ঢাকা।
১১. পরিচালক, শহীদ সোহরাওয়ার্দী মেডিকেল কলেজ, ঢাকা।
১২. WHO Representative Bangladesh (WR)
১৩. অফিস কপি।

26/10/23

Government of the People's Republic of Bangladesh
Planning and Research
Directorate General of Health Services
Mohakhali, Dhaka-1212

Memo No.: DGHS/P& R/WHO/PM/398 Date: 28/11/2024

Subject: High level consultative workshop for the endorsement of the National Health Service Standards for Bangladesh"

This is to inform you that the High-Level Consultative Workshop for the Endorsement of the National Health Service Standards for Bangladesh will be held on Monday, 9 December 2024, from 10:00 AM to 4:00 PM at the Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP), CICC, First Floor, Chameli House, 17 Topkhana Road, Dhaka 1000. Prof. Dr. Sheikh Sayidul Haque, Additional Director General (Planning and Development), will presided over the workshop.

We are honored to share that Prof. Dr. Md. Abu Jafor, Honorable Director General (Health) of the Directorate General of Health Services (DGHS), has graciously consented to attend as the Chief Guest.

Special Guest:

- Additional Secretary (Admin), MoHFW
- Additional Secretary (Planning), MoHFW
- Additional Secretary (Hospital), MoHFW
- Additional Secretary (WHO Wing), MoHFW
- Additional Secretary (Public Health), MoHFW

Your presence and timely participation are earnestly requested, as your contributions will be invaluable to the success of this significant initiative.

28/11/2024

Director
Planning and Research
Directorate General of Health Services (DGHS)

CC to-

1. Director General, Directorate General of Health Services (DGHS), Mohakhali, Dhaka (Attn: Assistant Director- Coordination)
2. PO to Additional Secretary (Admin/Planning/WHO Wing/ Hospital/Public Health)
3. Team Leader- Health Systems, WHO Bangladesh
4. Office copy

Participants List (Not According to Seniority)

DGHS:

1. Director General, DGHS.
2. Addl. Director General (Administration), DGHS.
3. Addl. Director General (Planning and Development), DGHS.
4. Director (Administration), DGHS.
5. Director (Planning & Research), DGHS.
6. Divisional Director (Health), Dhaka / Rajshahi / Chattogram / Barishal / khulna / Mymensingh / Rangpur / Sylhet, Division.
7. Director (Hospital & Clinics), DGHS.
8. Director, Primary Health Care, DGHS.
9. Director (AIDS/STD)
10. Director, Disease Control, DGHS
11. Director, MIS, DGHS.
12. Director, Dhaka Medical College Hospital
13. Director, Kurmitola General Hospital, Dhaka.
14. Director, National Institute of Cardiovascular Disease, Dhaka.
15. Director, National Institute of Neuro Sciences & Hospital, Dhaka.
16. Line Director, UHC OP, DGHS.
17. Line Director, CBHC OP, DGHS.
18. Line Director, NCDC OP, DGHS.
19. Line Director, MNCAH OP, DGHS.
20. Deputy Director, Planning & Research, DGHS.
21. Asstt. Director (Planning), Planning & Research, DGHS.
22. Asstt. Director (Co-ordination), DGHS.
23. Asstt. Director (Project Co-ordination), DGHS.
24. Dr. Anowar Sadat, DPM (Co-ordination), PMR OP, DGHS.
25. Dr. Abdullah-Al-Faisal, DPM (Monitoring), PMR OP, DGHS.
26. Medical Officer to DG, DGHS.
27. Medical Officer to ADG (P&D), DGHS.
28. Dr. Ahasun Ullah Sikder, Research Officer, Planning & Research, DGHS.
29. Dr. Muhammed Saiful Islam, Medical Officer, Planning & Research, DGHS.
30. Dr Z M Tanveer Subah, Medical Officer, Planning & Research, DGHS.
31. Dr Dhimanendu Roy Dhiman, Medical Officer, Planning & Research, DGHS.
32. Dr. Md. Mesbah Ul Hasan Roman, Medical Officer, Planning & Research, DGHS.
33. Dr. Manoshi saha, Medical Officer, Planning & Research, DGHS.

MoH&FW:

34. Additional Secretary (Administration wing), HSD.
35. Additional Secretary (Planning wing), HSD.
36. Additional Secretary (Hospital wing), HSD.
37. Additional Secretary (WHO wing), HSD.
38. Additional Secretary (Public Health wing), HSD.
39. Join Secretary (Administration wing), HSD.
40. Join Secretary (Planning wing), HSD.
41. Join Secretary (WHO wing), HSD.
42. Join Secretary (Public Health wing), HSD.
43. Deputy Secretary (World Health-1), HSD.
44. Deputy Secretary (World Health-2), HSD.

Society Representative

45. President/Representative, Bangladesh Society of Medicine
46. President/Representative, Society of Surgeons of Bangladesh
47. President/Representative, Bangladesh Paediatric Association (BPA)
48. President/Representative, Obstetrical and Gynaecological Society of Bangladesh
49. President/Representative, Bangladesh Society of Anaesthesiologists Critical Care and Pain Physicians (BSA-CCPP)

Development Partners

WHO:

1. Special Guest - WHO Representative Bangladesh
2. Team Leads - 4 WHO
3. Technical officers health systems - 8 WHO

Development Partners

1. Country Representative UNICEF
2. Country Representative USAID
3. Country Representative JICA
4. Country Representative UNFPA

Government of the People's Republic of Bangladesh
Directorate General of Health Services
Planning and Research
Mohakhali, Dhaka-1212

Memo: No. DGHS/P& R/WHO/PM/259 *Date: 14/10/2024*

WHO Representative to Bangladesh
World Health Organization (WHO)
Country office for Bangladesh
House -1/A, Road-8 Gulshan- 1, Dhaka-1212, Bangladesh

Atten: Sangay Wangmo -Team Leader Health Systems , WHO

Subject: DFC for Technical support to organize a high-level consultation for the endorsement of the National Health Service Standards for Bangladesh.

With reference to the above, we would like to enclose a DFC proposal with budget for technical support organize a high-level consultation for the endorsement of the National Health Service Standards for Bangladesh. The objective of DFC is to organize final consultation on the national health service standard for endorsement by MOHFW. With request from DGHS, WHO has mobilized national and international experts for development of national health service standard. The draft document has been reviewed by a series of consultations of key stakeholders, technical working group and advisory group including development partner and field level health manager. Now the document needs to be endorsed by MOHFW. For this a final round of review, consultation is requested for final scrutiny and modification of the document to the current context deem appropriate for the endorsement of the document for adaptation.

Thank you for your kind co-operation in this regard.

Dr. Md Abdul Alim
Assistant Director (Planning) PMR
Programme Manager
Integrated Services & Essential Service Package
DGHS, Mohakhali, Dhaka-1212

Attachment:
1. DFC proposal
2. Budget

CC to:
1. Director General, Directorate General of Health Services, Mohakhali Dhaka -1212 (Attention: Deputy director coordination)
2. Pallav Bhatt, Technical officer IHSD, WHO
3. Dr Murad Sultan -National Professional Officer PSBS, WHO

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
স্বাস্থ্য অধিদপ্তর
পরিচালক (পরিকল্পনা ও গবেষণা)-এর দপ্তর
মহাখালী, ঢাকা-১২১২
www.dghs.gov.bd

স্মারক নম্বর: ৪৫.০১.০০০০.০০০.০০৬.৮৫.০০০১.২১.৯২

তারিখ: ১ জ্যৈষ্ঠ ১৪৩২ বঙ্গাব্দ
১৫ মে ২০২৫ খ্রিস্টাব্দ

বিষয়: **"National Health Services Standard for Bangladesh" এর পাণ্ডুলিপি অনুমোদন প্রসঙ্গে।**

উপর্যুক্ত বিষয়ের আলোকে জানানো যাচ্ছে যে, স্বাধীনতার ৫৩ বছরে বাংলাদেশের স্বাস্থ্য ব্যবস্থা একাধিক সংস্কারের মধ্য দিয়ে গেছে। ২০১৬ সালে সরকার নির্ধারিত Essential Service Package এর সেবাসমূহও অদ্যবধি সফলভাবে বাস্তবায়ন করা সম্ভব হয়নি। একইসাথে স্তরভিত্তিক (প্রাইমারি, সেকেন্ডারি, টার্শিয়ারি) স্বাস্থ্যসেবা প্রদানকারী প্রতিষ্ঠানসমূহের সেবাপ্রদানের স্ট্যান্ডার্ড (মানদন্ড) অদ্যবধি সুপ্রতিষ্ঠিত করা সম্ভব হয়নি।

প্রাইমারি, সেকেন্ডারি, টার্শিয়ারি স্বাস্থ্যসেবা প্রদানকারী প্রতিষ্ঠানসমূহের সেবাপ্রদানের স্ট্যান্ডার্ড (মানদন্ড) সুপ্রতিষ্ঠিত করার লক্ষ্যে পরিকল্পনা ও গবেষনা, স্বাস্থ্য অধিদপ্তর কর্তৃক বিশ্বস্বাস্থ্য সংস্থা (WHO) এর কারিগরি সহযোগিতায় একটি শূণ্যশ প্রস্তাবনা "National Health Services Standards for Bangladesh" তৈরি করেছে। ইতঃমধ্যে তা সর্বস্তরের অংশীজনের সাথে শেয়ার করা হয়েছে [High-Level Consultative Workshop for the Endorsement of the National Health Service Standards for Bangladesh at Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP), CICC, First Floor, Chameli House, 17 Topkhana Road, Dhaka 1000 on 9th December 2024]। উক্ত কর্মশালার অংশীজনদের বিজ্ঞ মতামতের ভিত্তিতে তৈরিকৃত প্রস্তাবণায় প্রয়োজনীয় পরিমার্জন করা হয়েছে।

এমতাবস্থায়, সরকারি পর্যায়ে স্বাস্থ্যসেবা প্রদানকারী স্তরভিত্তিক প্রতিষ্ঠানসমূহের (প্রাইমারি, সেকেন্ডারি, টার্শিয়ারি) সেবাপ্রদানের স্ট্যান্ডার্ড (মানদন্ড) সুপ্রতিষ্ঠিত করার লক্ষ্যে পরিকল্পনা ও গবেষনা, স্বাস্থ্য অধিদপ্তর কর্তৃক প্রস্তুতকৃত খসড়া "National Health Services Standards for Bangladesh" এর পাণ্ডুলিপি মন্ত্রণালয়ের অনুমোদনের জন্য প্রেরণ করা হল।

সংযুক্তিঃ খসড়া "National Health Services Standards for Bangladesh"এর পাণ্ডুলিপি।

সকল সংযুক্তিসমূহ:
(১) National Health Services Standards -V-F_08.02.2025.pdf
(২) NHSS Monitoring Framework and Checklists.pdf jan.pdf

১৫-০৫-২০২৫
ডাঃ আফরিনা মাহমুদ
পরিচালক (পরিকল্পনা ও গবেষণা)

সচিব
সচিবের দপ্তর, স্বাস্থ্য সেবা বিভাগ।

দৃষ্টি আকর্ষণ (জ্যেষ্ঠতার ক্রমানুসারে নয়):
অতিরিক্ত সচিব, প্রশাসন অনুবিভাগ, স্বাস্থ্য সেবা বিভাগ।

স্মারক নম্বর: ৪৫.০১.০০০০.০০০.০০৬.৮৫.০০০১.২১.৯২/১ (১০)

তারিখ: ১ জ্যৈষ্ঠ ১৪৩২ বঙ্গাব্দ
১৫ মে ২০২৫ খ্রিস্টাব্দ

সদয় জ্ঞাতার্থে/জ্ঞাতার্থে (জ্যেষ্ঠতার ক্রমানুসারে নয়):

১। মহাপরিচালক, মহাপরিচালকের দপ্তর, স্বাস্থ্য অধিদপ্তর।
২। অতিরিক্ত মহাপরিচালক (প্রশাসন) (চলতি দায়িত্ব), অতিরিক্ত মহাপরিচালক (প্রশাসন)-এর দপ্তর, স্বাস্থ্য অধিদপ্তর।
৩। অতিরিক্ত মহাপরিচালক (পরিকল্পনা ও উন্নয়ন), অতিরিক্ত মহাপরিচালক (পরিকল্পনা ও উন্নয়ন)-এর দপ্তর, স্বাস্থ্য অধিদপ্তর।
৪। অতিরিক্ত সচিব, পরিকল্পনা অনুবিভাগ, স্বাস্থ্য সেবা বিভাগ।
৫। উপ পরিচালক (চলতি দায়িত্ব), উপপরিচালক (পরিকল্পনা ও গবেষণা) এর দপ্তর, স্বাস্থ্য অধিদপ্তর।
৬। সহকারী পরিচালক, পরিচালক (পরিকল্পনা ও গবেষণা)-এর দপ্তর, স্বাস্থ্য অধিদপ্তর।
৭। উপদেষ্টার একান্ত সচিব, উপদেষ্টার দপ্তর, স্বাস্থ্য সেবা বিভাগ।
৮। বিশেষ সহকারীর একান্ত সচিব, বিশেষ সহকারীর দপ্তর, স্বাস্থ্য সেবা বিভাগ।
৯। সচিবের একান্ত সচিব, সচিবের দপ্তর, স্বাস্থ্য সেবা বিভাগ।
১০। National Professional Officer (NPO), WHO।

১৫-০৫-২০২৫
ডা. এহেছান উল্লাহ সিকদার
গবেষণা কর্মকর্তা

Annex G Office order on Development Workshops with Tertiary Health Care working Committee

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পরিকল্পনা ও গবেষণা
স্বাস্থ্য অধিদপ্তর
মহাখালী, ঢাকা ১২১২
www.dghs.gov.bd

[illegible]/WHO/NHSSD[illegible] [illegible]

[illegible] Days Hotel, Dhaka (69 Suhrawardy Ave. Baridhara Diplomatic Zone, Dhaka 1212) [illegible] (WHO) [illegible] 'National Health Services Standard Development for Bangladesh' [illegible] Working Committee [illegible] Tertiary Health Care [illegible]

[illegible] 'National Health Services Standard Development for Bangladesh' [illegible] Working Committee [illegible] Tertiary Health Care [illegible]

[illegible] Days Hotel, Dhaka: 69 Suhrawardy Ave. Baridhara Diplomatic Zone, Dhaka 1212

[illegible]

[illegible]

Email: rd@ld.dghs.gov.bd

[illegible]

[illegible]

4. WHO Representative Bangladesh (WR)

Annex F Office order on Development Workshops with Secondary Health Care working Committee

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
স্বাস্থ্য অধিদপ্তর
পরিকল্পনা ও গবেষণা
মহাখালী, ঢাকা-১২১২
www.dghs.gov.bd

স্মারক নং: স্বা: অধি/ পরি: ও গবে/ WHO/NHSSD/১৯/২০২৩/ ৪৮৪ তারিখ: ১৭-০৯-২০২৩ ইং

অফিস আদেশ

আগামী ১১/০৯/২০২৩ইং রোজ মঙ্গলবার, ১৩/০৯/২০২৩ইং রোজ বুধবার এবং ১৪/০৯/২০২৩ইং রোজ বৃহস্পতিবার সকাল ৯.৩০ ঘটিকায় Nascent Gardenia Residence (House-17, Road- 01, Block- B, Niketan, Gulshan-1, Dhaka-1212) কোয়েস্ট স্বাস্থ্য অধিদপ্তরের পরিকল্পনা ও গবেষণা শাখা, ও বিশ্ব স্বাস্থ্য সংস্থা (WHO) এর উদ্যোগে "National Health Services Standard Development for Bangladesh" প্রণয়নের লক্ষ্যে গঠিত Working Committee-র Secondary Health Care উপ-কমিটির প্রথম, দ্বিতীয় ও তৃতীয় কর্মশালা আহবান করা হয়েছে।

উক্ত কর্মশালায় "National Health Services Standard Development for Bangladesh" এর Working Committee-র Secondary Health Care উপ-কমিটির নিম্নবর্ণিত সকল সদস্যকে উপস্থিত থাকার জন্য বিশেষভাবে অনুরোধ করা হল

স্থান: Nascent Gardenia Residence (House-17, Road- 01, Block- B, Niketan, Gulshan-1, Dhaka-1212)

তারিখ: ১. প্রথম কর্মশালা: ১১/০৯/২০২৩ইং রোজ মঙ্গলবার
২. দ্বিতীয় কর্মশালা: ১৩/০৯/২০২৩ইং রোজ বুধবার
৩. তৃতীয় কর্মশালা: ১৪/০৯/২০২৩ইং রোজ বৃহস্পতিবার

সময়: সকাল ৯:৩০ ঘটিকা হতে বিকেল ৫:০০ ঘটিকা পর্যন্ত।

ডা. আবদুল আজীজ
সহকারী পরিচালক
(পরিকল্পনা ও গবেষণা)
ও
সমন্বয় কর্মকর্তা
এনএইচএসএসডি
Email: rd@ld.dghs.gov.bd

বিতরণ (জ্যেষ্ঠতার ক্রমানুসারে নয়):

১. ডা. মীর মোশারফ হোসেন, উপ-পরিচালক, পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।
২. ডা. তানভীর আহমেদ, ডেপুটি প্রোগ্রাম ম্যানেজার, এইচআরএম, স্বাস্থ্য অধিদপ্তর।
৩. ডা. মোঃ জাহাঙ্গীর আলম, সুপারিনটেনডেন্ট (সহকারী পরিচালক), শহীদ আহসান উল্লাহ মাস্টার জেনারেল হাসপাতাল, টঙ্গী।
৪. ডা. মনি মাতলা, সহযোগী অধ্যাপক, মেডিসিন বিভাগ, ঢাকা মেডিকেল কলেজ।
৫. ডা. মোহাম্মদ আশরাফুল আলম, সহকারী অধ্যাপক, কার্ডিওলজি, এনআইসিভিডি, ঢাকা।
৬. ডা. এহেছান উল্লাহ সিকদার, গবেষণা কর্মকর্তা, পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।

অনুলিপি (জ্যেষ্ঠতার ক্রমানুসারে নয়):

১. মহাপরিচালক, স্বাস্থ্য অধিদপ্তর, মহাখালী (দৃ: আ: সহকারী পরিচালক, সমন্বয়)।
২. অতিরিক্ত পরিচালক (পরিকল্পনা ও উন্নয়ন), স্বাস্থ্য অধিদপ্তর, মহাখালী।
৩. পরিচালক, পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর, মহাখালী।
৪. WHO Representative Bangladesh (WR)

Annex E Office order on Development Workshops with Extended Primary Health Care working Committee

[illegible]
স্বাস্থ্য অধিদপ্তর
পরিচালনা ও গবেষণা
মহাখালী, ঢাকা-১২১২
www.dghs.gov.bd

স্মারক নং- স্বা: অধি: পরি: ও গবে: WHO/NHSSD/২০২২/৪৮৫ তারিখ: ২১-০৮-২০২২ ইং

অফিস আদেশ

আগামী ০৭/০৯/২০২২ইং থেকে বৃহস্পতিবার, ১০/০৯/২০২২ইং থেকে রবিবার এবং ১১/০৯/২০২২ইং থেকে সোমবার সকাল ৯.৩০ ঘটিকায় Nascent Gardenia Residence (House-17, Road- 01, Block- B, Niketan, Gulshan-1, Dhaka-1212) কোমলে স্বাস্থ্য অধিদপ্তরে পরিচালক ও গবেষণা শাখা, ও বিশ্ব স্বাস্থ্য সংস্থা (WHO) এর উদ্যোগে "National Health Services Standard Development for Bangladesh" প্রণয়নের লক্ষ্যে তীয় Working Committee-র Extended Primary Health Care উপ-কমিটির তৃতীয়, দ্বিতীয় ও তৃতীয় কর্মশালা আয়োজন করা হয়েছে।

উক্ত কর্মশালায় "National Health Services Standard Development for Bangladesh" এর Working Committee-র Extended Primary Health Care উপ-কমিটির সিদ্ধান্তিত সকল বিষয়ের উপস্থিত থাকার জন্য বিশেষভাবে অনুরোধ করা হল।

(স্থান: Nascent Gardenia Residence (House-17, Road- 01, Block- B, Niketan, Gulshan-1, Dhaka-1212)

তারিখ: ১. প্রথম কর্মশালা: ০৭/০৯/২০২২ইং থেকে বৃহস্পতিবার
২. দ্বিতীয় কর্মশালা: ১০/০৯/২০২২ইং থেকে রবিবার
৩. তৃতীয় কর্মশালা: ১১/০৯/২০২২ইং থেকে সোমবার

সময়: সকাল ৯.৩০ ঘটিকা হতে বিকেল ৫.০০ ঘটিকা পর্যন্ত।

[illegible]
ডা. আবদুল আজিজ
মহাপরিচালক
(পরিচালনা ও গবেষণা)
ও
সমন্বয় কর্মকর্তা
এনসিডিকেআরসি
Email: rd@ld.dghs.gov.bd

বিতরণ (জ্যেষ্ঠতার ক্রমানুসারে নয়):

১. ডা. দীপঙ্কর সিকদার, মহাপরিচালক, পরিচালনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।
২. ডা. আবদুল্লাহ আরমান, উপজেলা স্বাস্থ্য ও পরিবার কল্যাণ কর্মকর্তা, মেডিসিন্স, ঢাকা।
৩. ডা. আশিকুর রহমান, সেন্টার ফ্রেন্ডস হাসপাতাল, ইউরোলজি এন্ড, স্বাস্থ্য অধিদপ্তর।
৪. ডা. আনোয়ার পাশা, প্রকাশনা সম্পাদক, চিকিৎসক।
৫. ডা. এ. এস. এম. আবুল কাশেম ভূঁইয়া আসোসিয়েট, সার্জারি বিভাগ, শহীদ সোহরাওয়ার্দী মেডিকেল কলেজ হাসপাতাল, ঢাকা।
৬. ডা. মোঃ সাইফুল ইসলাম, মেডিকেল অফিসার, পরিচালনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।

অনুলিপি (জ্যেষ্ঠতার ক্রমানুসারে নয়):

১. মহাপরিচালক, স্বাস্থ্য অধিদপ্তর, মহাখালী (দৃ: আ: মহাখালী পরিচালক, সমন্বয়)।
২. অতিরিক্ত পরিচালক (পরিচালনা ও উন্নয়ন), স্বাস্থ্য অধিদপ্তর, মহাখালী।
৩. পরিচালক, পরিচালনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর, মহাখালী।
৪. WHO Representative Bangladesh (WR)

অনুলিপি (জ্যেষ্ঠতার ক্রমানুসারে নয়):

1. মহাপরিচালক, স্বাস্থ্য অধিদপ্তর মহাখালী ঢাকা, (বঃ আঃ সহকারী পরিচালক, সমন্বয়)।
2. অতিরিক্ত মহাপরিচালক, (পরিকল্পনা ও উন্নয়ন) স্বাস্থ্য অধিদপ্তর মহাখালী।
3. পরিচালক, পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর, মহাখালী।
4. WHO Representative Bangladesh (WR)

Annex D Office order on development workshops with Primary Health Care working Committee

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Nascent Gardenia Residence (House-17, Road- 01, Block- B, Niketan, Gulshan-1, Dhaka-1212)

'National Health Services Standard Development for Bangladesh'

Working Committee-4 Primary Health Care

Nascent Gardenia Residence (House-17, Road- 01, Block- B, Niketan, Gulshan-1, Dhaka-1212)

Email: rd@ld.dghs.gov.bd

১৮. ডা. মোহাম্মদ আশরাফুল আলম, সহকারী অধ্যাপক, কার্ডিওলজি, এনআইসিভিডি, ঢাকা।
১৯. ডা. এ বি এম সারওয়ার জাহান, কনসালটেন্ট অ্যানেস্থেসিওলজিস্ট, অ্যানেস্থেসিয়া, অ্যানালজেসিয়া এবং আইসিইউ বিভাগ, ডিএসএফএমইউ এবং যুগ্ম সচিব, ডিএসএসি সিবিসি।
২০. অধ্যাপক ডা. ইফফাত আরা, ইসি সদস্য-ওজিএসবি।
২১. ডা. ফারজানা পীরু, প্রকাশনা সম্পাদক-ওজিএসবি।
২২. ডা. ইসরাত জাহান উপল, ডিপিএম, এইচএসএম ওপি, স্বাস্থ্য অধিদপ্তর।
২৩. ডা. বি.এম. রিয়াজুল ইসলাম, ডেপুটি ডিজি (মেডিকেল), এমআইএস, স্বাস্থ্য অধিদপ্তর।
২৪. ডা. এহেসান উল্লাহ সিকদার, গবেষণা কর্মকর্তা, পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।
২৫. ডা. মোঃ সাইফুল ইসলাম, মেডিকেল অফিসার, পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।
২৬. ডা. জেড এম তানভীর সুবাহ, মেডিকেল অফিসার, পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।
২৭. অফিস কপি।

অনুলিপি (জ্যেষ্ঠতার ক্রমানুসারে নয়):

১. মহাপরিচালক, স্বাস্থ্য অধিদপ্তর। (দৃ: আ: সহকারি পরিচালক (সমন্বয়), স্বাস্থ্য অধিদপ্তর)।
২. অতিরিক্ত মহাপরিচালক (পরিকল্পনা ও উন্নয়ন), স্বাস্থ্য অধিদপ্তর। (দৃ: আ: সহকারি পরিচালক (প্রকল্প সমন্বয়), স্বাস্থ্য অধিদপ্তর)।
৩. WHO Representative Bangladesh (WR)
৪. সভাপতি/সেক্রেটারি, বাংলাদেশ সোসাইটি অফ মেডিসিন।
৫. সভাপতি/সেক্রেটারি, সোসাইটি অফ সার্জনস বাংলাদেশ।
৬. সভাপতি/সেক্রেটারি, অবস্ এন্ড গাইনিকোলজিক্যাল সোসাইটি অফ বাংলাদেশ (ওজিএসবি)।
৭. সভাপতি/সেক্রেটারি, বাংলাদেশ পেডিয়াট্রিক্স এসোসিয়েশন।
৮. প্রেসিডেন্ট/সেক্রেটারি, ডিএসএস-সিসিবিপি।

31.07.23

ডা. এহেসান উল্লাহ সিকদার
গবেষণা কর্মকর্তা
পরিকল্পনা ও গবেষণা, স্বাস্থ্য অধিদপ্তর।
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MINISTRY OF HEALTH AND FAMILY WELFARE (MOHFW)
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH