Government of the People's Republic of Bangladesh
Ministry of Health and Family Welfare

HEALTH BULLETIN 2024

Management Information System
Directorate General of Health Services
Mohakhali, Dhaka 1212, www.dghs.gov.bd

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June 2025

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We acknowledge the contributions of all other personnel who were involved directly or indirectly in the production of this bulletin by sending data or providing logistical support.

Acknowledgments

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Acronyms

ACSM	Advocacy, Communication, and Social Mobilization
ACR	Annual Confidential Report
ACT	Artemisinin-based Combination Therapy
ADB	Asian Development Bank
ADL	Adeno-Lymphangitis
ADP	Annual Development Program
AEFI	Adverse Events Following Immunization
AeHIN	Asian eHealth Information Network
AFP	Acute Flaccid Paralysis
AHI	Assistant Health Inspector
a2i	Access to Information
AIDS	Acquired Immunodeficiency Syndrome
ALB	Albendazole
ALS	Average Length of Stay
AMC	Alternative Medical Care
AMR	Antimicrobial Resistance
ANC	Antenatal Care
API	Annual Parasite Incidence/Application Programming Interfaces
APIR	Annual Program Implementation Report
APR	Annual Program Review
ARC	American Red Crescent/Antimicrobial Resistance Containment
ARI	Acute Respiratory Infection
ARSH	Adolescent Reproductive Strategy for Health
ART	Antiretroviral Treatment/Antiretroviral Therapy
ASCEND	Accelerating the Sustainable Control and Elimination of Neglected Tropical Diseases
ASD	Autism Spectrum Disorder
ASP	AIDS/STD Program
AWD	Acute Watery Diarrhea
BAMS	Bachelor of Ayurvedic Medicine & Surgery
BBS	Bangladesh Bureau of Statistics
BCC	Behavior Change Communication/ Barisal City Corporation
BCG	Bacillus Calmette–Guérin
BCPS	Bangladesh College of Physicians and Surgeons
BCS	Bangladesh Civil Service
BDHS	Bangladesh Demographic and Health Survey
BDT	Bangladeshi Taka
BEOC	Basic Emergency Obstetric Care
BHFS	Bangladesh Health Workforce Survey
BHMS	Bachelor of Homeopathic Medicine and Surgery
BITID	Bangladesh Institute of Tropical and Infectious Disease
BMDC	Bangladesh Medical and Dental Council
BMRC	Bangladesh Medical Research Council
BNC	Bangladesh Nursing Council
BNHA	Bangladesh National Health Accounts
BIRDEM	Bangladesh Institute of Research and Rehabilitation for Diabetes, Endocrine and Metabolic Disorders
BNNC	Bangladesh National Nutrition Council
BNSB	Bangladesh National Society of Blind
bOPV	bivalent Oral Polio Vaccine
BOR	Bed-occupancy Ratio/Rate
BPL	Below Poverty-line
BRAC	Bangladesh Rural Advancement Committee
BRIS	Birth Registration Information System
BRN	Birth Registration Number
BSL	Biosafety Level
BSMMU	Bangabandhu Sheikh Mujib Medical University
BST	British Summer Time
BTRC	Bangladesh Telecommunication Regulatory Commission
BUET	Bangladesh University of Engineering and Technology
BUMS	Bachelor of Unani Medicine and Surgery
CAGR	Compound Annual Growth Rate
CAPABLE	Cambridge Program to Assist Bangladesh in Lifestyle and Environmental Risk Reduction
CBE	Clinical Breast Examination
CBHC	Community-based Healthcare
CC	Community Clinic/ City Corporation
CCC	Chattogram City Corporation
CCU	Cardiac/Coronary Care Unit
CDC	Communicable Disease Control
CDD	Control of Diarrheal Diseases
CD-VAT	Customs Duty and Value Added Tax
CEmOC	Comprehensive Emergency Obstetric Care
CES	Coverage Evaluation Survey
CFR	Case-fatality Rate
CG	Community Group
CHCP	Community Healthcare Provider

CHT	Chattogram Hill Tracts
CHW	Community Health Worker
CIDA	Canadian International Development Agency
CIDD	Control of Iodine Deficiency Disorder
CIN	Cervical Intra-epithelial Neoplasia
CIPRB	Centre for Injury Prevention and Research, Bangladesh
CMBT	Center for Medical Biotechnology
CME	Centre for Medical Education
CNCP	Comprehensive Newborn Care Package
CMSD	Central Medical Store Depot
COPD	Chronic Obstructive Pulmonary Disease
CPR	Contraceptive Prevalence Rate
CR	Civil Registration
CRD	Chronic Respiratory Disease
CRPD	Convention on the Rights of Persons with Disabilities
CRVS	Civil Registration and Vital Statistics
CS	Civil Surgeon
CSBA	Community-based Skilled Birth Attendant
CSG	Community Support Group
CSO	Civil Society Organization
CT	Computed Tomography
CtC	Child-to-Child
ComCC	Comilla City Corporation
CVASU	Chittagong Veterinary Animal Science University
CVD	Cardiovascular disease
cVDPV	circulating Vaccine-Derived Polio Virus
DALYs	Disability-Adjusted Life Years
DAMS	Diploma in Ayurvedic Medicine and Surgery
DCC	District Coordination Committee
DDO	Drawing and Disbursing Order
DEC	Diethyl-Carbamazine
DEPB	Develop Evidence-based Planning and Budgeting
Dev.	Development
D4D	Data for Decision
DFATD	Department of Foreign Affairs, Trade and Development
DF/DHF	Dengue Fever/Dengue Hemorrhagic Fever
DFID	Department for International Development
DGDA	Directorate General of Drug Administration
DGFP	Directorate General of Family Planning
DGHEU	Directorate General of Health Economics Unit
DGHS	Directorate General of Health Services
DGME	Directorate General of Medical Education
DGNM	Directorate General of Nursing and Midwifery
DH	District Hospital
DHIS2	District Health Information System software version 2
DHMS	Diploma in Homoeopathic Medicine and Surgery
DHS	Demographic Health Survey
DICs	Drop-in-Centers
DLI	Disbursement Link Indicator
DLS	Department of Livestock
DMCH	Dhaka Medical College Hospital
DNA	Deoxyribonucleic Acid
DNCC	Dhaka North City Corporation
DOTS	Directly-observed Treatment-Short Course
DPA	Direct Project Aid
DR	Disaster Recovery
DRPCC	District Rabies Prevention and Control Center
DSCC	Dhaka South City Corporation
DSF	Demand-side Financing
DUMS	Diploma in Unani Medicine and Surgery
EA	Enterprise Architecture
EBS	Event-based Surveillance
ECG	Electrocardiogram
ECNEC	Executive Committee of National Economic Council
eHealth	Electronic Health
EmONC	Emergency Obstetric and Newborn Care
EMR	Electronic Medical Record
EOC	Emergency Obstetric Care
EPI CES	Expanded Program on Immunization, Coverage Evaluation Survey
ERD	Economic Relations Division
ERP	Emergency Response Preparedness
ESD	Essential Service Delivery
ETL	Extract Transform Load
EU	Evaluation Unit
EWARS	Early Warning Alert and Response System
FAO	Food and Agriculture Organization
FBIS	Foodborne Illness Surveillance
FCPS	Fellow of the College of Physicians and Surgeons
FCTC	Framework Convention on Tobacco Control
FD	Finance Division
FDMNs	Forcibly Displaced Myanmar Nationals
FETP,B	Field Epidemiology Training Program, Bangladesh
FP	Family Planning
FPI	Family Planning Inspector
FSW	Female Sex Worker

FWA	Family Welfare Assistant
FWV	Femily Welfare Visitor
FY	Fiscal Year
FYP	Five-year Plan
GAVI	Global Alliance for Vaccines and Immunization
GBS	Guillain-Barre Syndrome
GCC	Gazipur City Corporation
GDD	Global Disease Detection
GDP	Gross Domestic Product
GED	General Economic Division
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GH	General Hospital
GHS	Global Health Security
GHSA	Global Health Security Agenda
GMP	Good Manufacturing Practice
GNI	Gross National Index
GOARN	Global Outbreak Alert and Response Network
GOB	Government of Bangladesh
Govt.	Government
GPELF	Global Program to Eliminate Lymphatic Filariasis
GPS	Global Positioning System
GR	Geographical Reconnaissance
HA	Health Assistant
HAV	Hepatitis A Virus
HBV	Hepatitis B Virus
HCPs	Healthcare Providers
HCV	Hepatitis C Virus
HDI	Human Development Index
HDU	High Dependency Unit
HEU	Health Economics Unit
HI	Health Inspector
HIE	Health Information Exchange
HIS	Health Information System
HISP,Bd	Health Information System Program, Bangladesh
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HNP	Health and Nutrition Program
HNPSIP	Health, Nutrition and Population Strategic Investment Plan
HPNSDP	Health, Population and Nutrition Sector Development Program
HPNSP	Health, Population and Nutrition Sector Program
HPSP	Health and Population Sector Plan
HPV	Human Papillomavirus
HR	Human Resource
HRH	Human Resource for Health
HRIS	Health Resource Information System
HRM	Human Resource Management
HRMS	Human Resource Management System
HSM	Hardware Security Module
HSS	Health System Strengthening
HWF	Health Workforce
IAEG-SDGs	Inter-agency and Expert Group on SDG Indicators
IBS	Irritable Bowel Syndrome
ICD-10	International Statistical Classification of Disease
icddr'b	International Centre for Diarrhoeal Disease Research, Bangladesh
ICMH	Institute of Child and Mother Health
ICT	Information and Communication Technology
ICU	Intensive Care Unit
ideSHi	Institute of developing Science and Health initiatives
ID-RV	Intra-dermal Route Vaccine
IEDCR	Institute of Epidemiology, Disease Control and Research
IHR	International Health Regulations
IHT	Institute of Health Technology
IMCI	Integrated Management of Childhood Illness
IMPACT	Improving Public Health Management for Action
IMNCI	Integrated Management of Neonatal and Childhood Illness
INFOSAN	International Network of Food Safety Authority
IPGMR	Institute of Postgraduate Medicine and Research
IPH	Institute of Public Health
IPHN	Institute of Public Health Nutrition
IPV	Inactivated Polio Virus Vaccine
ISDP	Integrated Service Delivery Platform
ISP	Internet Service Provider
IT	Information Technology
IV	Intravenous Fluid
IVM	Integrated Vector Management
JE	Japanese encephalitis
JEE	Joint External Evaluation
JHU	Johns Hopkins University
JICA	Japan International Cooperation Agency
JCC	Joint Coordination Committee
JPEG	Joint Photographic Experts Group

KA	Kala-azar
KCC	Khulna City Corporation
KMC	Kangaroo Mother Care
KSM	Kala-azar Search Volunteer
LAN	Local Area Networking
LD	Line Director
LEEP	Loop Electrosurgical Excision Procedure
LF	Lymphatic Filariasis
LG	Local Government
LHB	Local Health Bulletin
L&HEP	Lifestyle, Health Education & Promotion
LLIN	Long-Lasting Insecticidal Nets
M&E	Monitoring & Evaluation
MARP	Most-at-risk Population
MAT	Medical Assistance Training
MATS	Medical Assistant Training School
MBBS	Bachelor of Medicine, Bachelor of Surgery
MBDC	Mycobacterium Disease Control
MBT	Medical Biotechnology
MCC	Mymensingh City Corporation
MCCoD	Medically Certified Cause of Death
MCH	Medical College Hospital
MCPS	Member of the College of Physicians & Surgeons
MCV1	Measles Coverage Vaccine first dose
MCWC	Maternal and Child Welfare Centers
MDA	Mass Drug Administration
MDGs	Millennium Development Goals
MDR	Multi-drug Resistance
MDT	Multi-drug Therapy
MDV	Mass Dog Vaccination
MEHM	Minimum European Health Module
MICS	Multiple Indicator Cluster Surveys
MIS	Management Information System
MMDP	Morbidity Management and Disability Prevention
MMEd	Masters in Medical Education
MMR	Maternal Mortality Ratio
MNCAH	Maternal, Neonatal, Child, and Adolescent Health
MNHI	Maternal and Newborn Health Initiative
MNT	Maternal and Neonatal Tetanus
MOCHTA	Ministry of Chittagong Hill Tracts Affairs
MOHA	Ministry of Home Affairs
MOHFW	Ministry of Health and Family Welfare
MOLGRD	Ministry of Local Government, Rural Development and Cooperatives
MPDSR	Maternal and Perinatal Death Surveillance and Response
MPH	Master in Public Health
M Phil	Master of Philosophy
MR	Measles-Rubella Vaccine
MRI	Magnetic Resonance Imaging
MRORI	Measles-Rubella Outbreak Response Immunization
MRS	Medical Record System
MSD	Measles Second Dose
MSH	Management Sciences for Health
MSM	Men having Sex with Men
MSW	Male Sex Worker
MT-EPI	Medical Technologist of Expanded Program on Immunization
MTR	Mid-term Review
NAC	National AIDS Committee
NAP	National Action Plan
NASP	National AIDS and STD Program
NAVC+	National Vitamin A plus Campaign
NBPH	National Bulletin of Public Health
NCC	Narayanganj City Corporation
NCD	Non-communicable Disease
NCT	National Competitive Tendering
NFC	National Fistula Center
NFM	New Funding Model
NFR	New Funding Request
NGOs	Non-governmental organizations
NHA	National Health Accounts
NHSDP	NGO Health Service Delivery Project
NIC	National Influenza Center
NICU	Neonatal Intensive Care Unit
NID	National ID/National Immunization Day
NIDCH	National Institute of Diseases of the Chest & Hospital
NINH	National Institute of Neurology & Hospital
NINS	National Institute of Neurosciences & Hospital
NIO	National Institute of Ophthalmology
NIPORT	National Institute of Population Research and Training
NIPSOM	National Institute of Preventive and Social Medicine
NISB	National Influenza Surveillance, Bangladesh
NITOR	National Institute of Traumatology and Orthopedics Rehabilitation
NiV	Nipah Virus
NKEP	National Kala-azar Elimination Program
NLEP	National Leprosy Elimination Program

nm	Nautical Mile
NMCP	National Malaria Control Program
NMR	Neonatal Mortality Rate
NMSS	National Micronutrients Status Survey
NNP	National Nutrition Program
NNHP	National Newborn Heath Program
NNS	National Nutrition Services
NPAN2	Second National Plan of Action for Nutrition
NPELF	National Program on Elimination of Lymphatic Filariasis
NQAS	National Quality Assurance Standards
NRPCC	National Rabies Prevention and Control Center
NSC	National Steering Committee
NSP	National Strategic Plan
NTBB	National Taskforce on Biotechnology of Bangladesh
NTC	National Technical Committee
NTCMB	National Technical Committee on Medical Biotechnology
NTDs	Neglected Tropical Diseases
NTP	National TB Program
NTRL	National TB Reference Laboratory
NTV	Nerve Tissue Vaccine
NTWG	National Technical Working Group
OCV	Oral Cholera Vaccination
OH-APP	OneHealth Assessment for Planning and Performance
OMR	Optical Mark Recognition
OP	Operational Plan
OPD	Outpatient Department
OpenMRS	Open Medical Record System
OPV	Oral Polio Vaccine
ORG	Office of Registrar General
ORI	Outbreak Response Immunization
ORS	Oral Rehydration Salt
ORT	Oral Rehydration Therapy
OSD	Officer on Special Duty
OT	Operation Theater
PA	Project Aid
PCR	Polymerase Chain Reaction
PCV	Packed Cell Volume
PDA	Personal Digital Assistant
PEP	Post-exposure Prophylaxis
Pf	Plasmodium falciparum
PH	Public Health
PHC	Primary Healthcare/Primary Health Center
PH&DTL	Public Health and Drug Testing Laboratory
PHEIC	Public Health Emergency of International Concern
PKDL	Post Kala-azar Dermal Leishmaniasis
PLHIV	People living with HIV
PLSM	Product Line Sales Manager/ Police Long Service Medal
PMIS	Personnel Management Information System
PMMU	Program Management & Monitoring Unit
PMO	Prime Minister's Office
PNC	Postnatal Care
PoE	Point of Entry
PPE	Personal Protective Equipment
PPM	Public-Private Mix
PPR	Public Procurement-related Rules
PRM	Population, Refugees and Migration/ Physician Relationship Management
PRS	Population Registration System
PRSP	Poverty Reduction Strategy Paper
PS&amp	Planning, Supply and ownership management program
PSM	Preventive and Social Medicine
PSTN	Public Switched Telephone Network
PUD	Peptic Ulcer Disease
PWID	People Who Inject Drugs
RangCC	Rangpur City Corporation
RADP	Revised Annual Development Program
RBC	Red Blood Cell
RBM	Roll Back Malaria
RCC	Rajshahi City Corporation
RCHCIB	Revitalization of Community Healthcare Initiative in Bangladesh
RDT	Rapid Diagnostic Tests
RDU	Research and Development Unit
REP	Rabies Elimination Program
Rev.	Revenue
RFI	Result Framework Indicators
RHC	Rural Health Center
RHIS	Routine Health Information System
RIG	Rabies Immunoglobulin
RKA	Relapsed Kala-azar
RMCS	Revised Malaria Control Strategies
RPA	Reimbursable Project Aid
RRRC	Refugee Relief and Repatriation Commissioner
RRT	Rapid Response Team
rRT-PCR	Real-time Reverse Transcription (RRT)-Polymerase Chain Reaction
RT-PCR	Reverse Transcription Polymerase Chain Reaction
RTRL	Regional TB Reference Laboratory

SAC	School-aged Children
SACMO	Sub-Assistant Community Medical Officer
SAP	Strategic Action Plan
SBA	Skilled Birth Attendant
SBCC	Social and Behavioral Change Communication
SBTP	Safe Blood Transfusion Program
SCC	Sylhet City Corporation
SCAPAND	Strategic and Convergent Action Plan on Autism and Neurodevelopment Disabilities
SCANU	Special Care Newborn Unit
SDGs	Sustainable Development Goals
SEARO	Southeast Asian Regional Office
SHR	Shared Health Record
SIP	Strategic Investment Plan
SKKRC	Surya Kanta Kala-azar Research Center
SMEE	Subject Matter Expert Exchange
SMoL	Start-up Mortality List
SOP	Standard Operating Procedure
SRH	Sexual and Reproductive Health
SSK	Shasthyo Surokhsha Karmasuchi
STD	Sexually Transmitted Disease
STG	Standard Treatment Guideline
STH	Soil-transmitted Helminthes
SVRS	Sample Vital Registration System
SWAp	Sector-wide Approach
TAS	Transmission Assessment Survey
TAST	Technical Assistance Support Team
TB	Tuberculosis
TCV	Time, Cost, and Visit
TCV	Tissue Culture Vaccine
TEMU	Transport & Equipment Maintenance Unit
TFR	Total Fertility Rate
THE	Total Health Expenditure
tOPV	trivalent Oral Polio Vaccine
TOT	Training of Trainers
TT	Tetanus Toxoid
TTGA	Taurocholate-tellurite-gelatin Agar
TTI	Transfusion-transmitted Infection
TTU	Technical Training Unit
TWG	Technical Working Group
UAT	User Acceptance Test
UCI	Universal Child Immunization
UESDS	Utilization of Essential Service Delivery Survey
UH&FPO	Upazila Health and Family Planning Officer
UHC	Universal Health Coverage/ Upazila Health Complex
UHFWC	Union Health and Family Welfare Center
U5MR	Under-five Mortality Rate
UN	United Nation
UNAIDS	Joint United Nations Program on HIV/AIDS
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Program
UNGASS	United Nations General Assembly Special Session
UNICEF	United Nations Children's Fund
UPHCP	Urban Primary Healthcare Project
UPS	Uninterruptible Power Supply
USAID	United States Agency for International Development
USC	Union Sub-center
USD	United States Dollar
USG	Ultrasonography
USI	Universal Salt Iodization
VA	Verbal Autopsy
VAC	Vitamin A Capsule
VAD	Vitamin A Deficiency
VIA	Visual Inspection with Acetic Acid
VL	Visceral Leishmaniasis
WPT	Water Purification Tablets
WASH	Water, Sanitation and Hygiene
WAZ	Weight-for-age z-score
WB	World Bank
WBC	White Blood Cell
WCBA	Women of Childbearing Age
WHO	World Health Organization
WiMAX	Worldwide Inter-operability for Microwave Access
WOAH	World Organization for Animal Health

Note: Through a recent government announcement, spellings of the names of some places, like Chiitagong, Comilla, Jessore, have been changed for adherence to their Bangla pronunciations. The new spellings could not be fully used in this publication because the institutions having names of these places have not yet changed the spellings. Following the principle of spelling proper nouns, we had to retain the old spellings of the names of these places associated with some institutions. However, Chattogram for Chittagong is used while we meant the name of the administrative division

Message

Nurjahan Begum
Honorable Adviser
Ministry of Health and Family Welfare

I am happy to learn that the Health Bulletin 2024 is going to be published by the Management Information System (MIS), DGHS. This is a yearly publication of MIS, DGHS which provides statistical evidence about our health situation in the country.

The Health Bulletin is a concise, relevant and well-structured publication of the DGHS. Although a large number of people seek health care from private providers, difficulty of gathering data from these sources is a limitation; some of the public sector hospitals also remain uncovered. I would like to request public facilities of all tiers to provide health data in the government central system and all private facilities to integrate with the government system. Our historic achievements in the Millennium Development Goals (MDGs) and smooth transitioning towards SDGs will guide us in the coming days. I am sure that the health policy makers, planners and program managers will definitely see this Health Bulletin as one of the good resources of the health sector of Bangladesh.

The Management Information System of the DGHS is continuously working on health system digitization, data collection, storing, and analysis. The ultimate aim of this Health bulletin is to create an environment for evidence-based decision making. I am optimistic that the strength and capacity of MIS will contribute to the health services of Bangladesh with more and more useful and beautiful publications.

I wish wide circulation of the Health Bulletin 2024.

Message

Professor Dr. Md. Sayedur Rahman
Special Assistant (State Minister)
Ministry of Health and Family Welfare

It is with profound satisfaction that I welcome the publication of the Health Bulletin 2024, a comprehensive and authoritative document that reflects the nation's evolving healthcare landscape. As the flagship publication of the Directorate General of Health Services (DGHS), this Bulletin remains an indispensable instrument for evidence-based policymaking, strategic planning, and informed governance within our health sector.

I extend my deepest appreciation to the Director General of the DGHS and the entire team for their exemplary leadership. My sincere gratitude goes to the dedicated professionals of MIS-Health and all contributing units for their careful efforts in data collection, rigorous verification, and insightful analysis, which form the very foundation of this work. I also acknowledge with great respect the unwavering commitment of all health service providers across the country, whose collective endeavors ensure healthcare delivery reaches every citizen.

The Government of Bangladesh continues to place the highest priority on advancing the health sector, resulting in significant milestones across diverse domains of public health. The DGHS, particularly through the pioneering work of MIS-Health, has been instrumental in generating success stories that have elevated Bangladesh's stature in global health forums. In this era, reliable and authentic data is paramount for accurately assessing service delivery, identifying gaps, and responding effectively to the needs of our population. The digital transformation and enhanced analytical capabilities spearheaded by MIS-Health have substantially fortified our monitoring, evaluation, and performance-tracking systems. The Health Bulletin 2024 will not only chronicle our achievements but also illuminate persistent challenges, thereby providing a clear roadmap for future strategies.

This publication is a testament to the collective diligence and expertise of all individuals involved in its creation. I extend my heartfelt thanks to everyone whose contributions made this possible. I remain confident that MIS-Health will continue to innovate and support the Ministry of Health and Family Welfare with even more transformative initiatives in the years to come. Let this Bulletin serve as both a record of our progress and a catalyst for renewed commitment to building a healthier, more resilient Bangladesh.

Message

Md. Saidur Rahman
Secretary
Health Services Division
Ministry of Health and Family Welfare

I am pleased to present the Health Bulletin 2024, published by the Management Information System (MIS), Directorate General of Health Services (DGHS). This bulletin serves as a valuable source of health-related data, reflecting Bangladesh's progress in healthcare delivery, disease control, and public health initiatives.

Over the years, Bangladesh has made remarkable strides in improving healthcare accessibility and quality. Through sustained efforts in universal health coverage, maternal and child health, communicable disease control, and digital health innovations, we continue to strengthen our healthcare system. The Health Bulletin 2024 provides an evidence-based overview of these achievements, highlighting key health indicators, challenges, and future directions.

I extend my appreciation to the dedicated healthcare professionals, policymakers, and development partners whose unwavering commitment drives our progress. I also commend the MIS-DGHS team for their efforts in compiling and publishing this essential document.

As we move forward, let us reaffirm our commitment to building a healthier Bangladesh, ensuring equitable and high-quality healthcare services for all.

Message

Prof. Dr. Md. Abu Jafor
Director General
Directorate General of Health Services
Government of the People's Republic of Bangladesh

I am highly pleased to learn that the Management Information System (MIS) of DGHS is going to publish its regular endeavor-the annual Health Bulletin.

This bulletin reflects our ongoing commitment to improving public health in Bangladesh. It contains vital data and analysis that are essential for shaping health policies, planning, and decision-making.

This year, we have made significant progress in various health programs, including maternal and child health, communicable and non-communicable diseases, and health infrastructure development. Despite the challenges, our dedicated health professionals have worked tirelessly to ensure the delivery of essential health services.

The Health Bulletin 2024 also highlights the collaborative efforts of various stakeholders, including government agencies, non-governmental organizations, and international partners, in advancing our health goals.

I am grateful to the Honorable Advisor to the Ministry of Health and Family Welfare and the Secretary for their constant support and guidance on this journey.

I extend my heartfelt congratulations and thanks to Dr. Abu Ahammad Al Mamun, Director, MIS, DGHS, for guiding the entire publication process as Chief Editor. I also express my sincere appreciation to all who contributed to this bulletin. Your efforts have made it possible to present a comprehensive and accurate picture of our health sector.

Let us continue working together to achieve our vision of a healthier Bangladesh.

Message

Professor Dr. Nazmul Hosain

Director General
Directorate General Of Medical Education
Govt. Of The Peoples Republic Of Bangladesh

I am overtly pleased to know that Health Bulletin, 2024 is going to be published. The purpose of this publication is to keep our community informed, empowered, and motivated to make well-informed decisions when it comes to their health and well-being.

As we know, health bulletin is one of the important annual publications of ministry of health and family welfare complied through health management information system. Through this bulletin, we strive to provide you with the latest health information and valuable resources for evidenced based health decision and policy formulation.

Healthcare and education are the two pillars that form the foundation of a strong and prosperous society. We all are consistently working towards enhancing both of these pillars through targeted initiatives aimed at providing quality education for aspiring healthcare professionals and ensuring that our healthcare services reach every corner of our society.

This bulletin is not only about information—it's about creating a conversation. We encourage all members of our community to actively engage with the content, share their experiences, and ask questions. We look forward to achieving the target of health related sustainable development goals (SDGs) within 2030.

I express special thanks to Director General of Health Services Prof. Dr. Md. Abu Jafor and to the Director, MIS Dr. Abu Ahammad Al Mamun and all MIS personnel and consultants for involvement in the process of publication of Health Bulletin 2024. Thank you for your commitment to learning, growing, and living healthily. Let's continue working together to build a healthier future for ourselves and those around us.

Message of Editor-in-Chief

Dr. Abu Ahammad Al Mamun
Director (MIS), DGHS

I am grateful to the Almighty for the opportunity to publish the Health Bulletin 2024, which reflects our continued commitment to strengthening Bangladesh's integrated health information system. This publication underscores the importance of a reliable and up-to-date health database for evidence-based decision-making, policy formulation, planning, research, governance, and effective health service delivery.

Under the supervision of the Directorate General of Health Services (DGHS), the Management Information System (MIS) plays a critical role in collecting data from public and private health facilities and transforming it into actionable information. Despite the complexity of compiling national health data, the MIS, DGHS has successfully converted large volumes of data into meaningful insights. The 2024 edition builds on previous achievements by incorporating real-time updates and comprehensive analyses, presenting a structured overview of health status, service delivery, financing, infrastructure, health rights, and healthcare networks in Bangladesh. This makes the bulletin an essential reference for all health sector stakeholders.

I express my sincere appreciation to Ms. Nurjahan Begum, Honorable Advisor, Ministry of Health and Family Welfare, Prof. Dr. Md. Sayedur Rahman, Honorable Special Assistant (State Minister), and Prof. Dr. Md. Abu Jafor, Director General of Health Services, for their invaluable guidance and support. I also commend the MIS team, healthcare professionals, data contributors, and public and private institutions for their dedication in ensuring the accuracy and timely production of this bulletin.

I encourage stakeholders to use this bulletin as a strategic resource for informed decision-making and policy improvement. Future editions will emphasize enhanced data quality, expanded private sector integration, strengthened real-time digital reporting, standardized data collection, improved data visualization, predictive analytics, and greater cross-sector collaboration. I welcome constructive feedback to further improve future editions and remain committed to ensuring that the Health Bulletin continues to support effective health sector planning in Bangladesh.

Contents

Bangladesh: Overview of Present Health Status

Introduction

Bangladesh, officially the People's Republic of Bangladesh, is a populous, low-lying country with an extensive domain and rich cultural heritage in South Asia. It gained independence in 1971 and operates as a parliamentary democracy. The country's economy is mixed and developing, with key sectors including agriculture, textiles, and remittances from overseas workers. Bangladesh is one of the few countries in the world that is recognized as a nation-state. The health system of Bangladesh is a multiethnic system with four key actors that define the structure and function of the system: government, private sector, non-governmental organizations (NGOs) and development partners. The current Interim Government has taken effective measures to develop an advanced and modern health care system in Bangladesh. To reach that goal "Health Sector Reform Commission" was formed on November 18, 2024, with the aim of making the country's health services people-oriented, accessible, and universal. The Government took multifaceted steps for the injured and martyrs of the July Revolution to provide medical and financial services and other benefits.

In 2024, Bangladesh's health system saw notable achievements, including advancements in maternal and child health, and a significant increase in health workforce density. The country continued to improve life expectancy and reduce mortality rates. Despite these achievements, Bangladesh continues to carry a high burden of disease that includes non-communicable diseases as well as communicable diseases like Dengue, Chikungunya, Scabies, etc.

Geography and Administrative Units

Bangladesh, a vibrant South Asian nation, is characterized by its flat landscapes and the winding rivers of the Ganges–Brahmaputra–Meghna delta. The country offers picturesque scenery with tranquil lakes, lush rainforests, and rolling tea gardens. Among its natural treasures is the Sundarbans, the world's largest mangrove forest and a UNESCO World Heritage Site, home to the Royal Bengal Tiger and diverse wildlife. Bangladesh's rich biodiversity is reflected in its abundant bird species, sprawling paddy fields, and year-round sunshine—complemented by the world's longest natural sea beach. (Table 1.1)

Table 1.1. Geography and Administrative units of Bangladesh

Geography			
Location	**Latitude: between 20°34' and 26°38' North Longitude: between 88°01' and 92°41' East**		
Boundary	North and West: India; East: India and Myanmar; South: Bay of Bengal		
Total area	~148,460 square km	Climate	Tropical
Land area	~130,170 square km	Standard time	GMT +6 hours
Water area	~18,290 square km	Rainfall	203 mm/month
Territorial water	12 nm	Climate	Tropical
Coastline	580 km		

Table 1.1 contd.

Table continued...			
Administrative Units			
Division	8	City Corporation Ward	465
District	64	Paurashava Ward	3075
City Corporation	12	Union	4596
Upazila	495	Mauza	58846
Metro Thana	105	Village (in rural area)	98049

Demography

Demographic data serves as the quantitative backbone of national analysis, capturing the dynamics of birth, death, and socio-economic factors that shape Bangladesh's population profile. Selected health-related indicators from national publications are presented here to reflect the country's current situation. Through careful collection, analysis, and interpretation, these data reveal the nation's underlying trends and transitions, providing essential insights for addressing public health challenges and guiding evidence-based planning in sectors such as healthcare and urban development.

Table 1.2. Population and key demographic characteristics of Bangladesh			
Population (based on PHC 2022)			
Total		171.0 million	
Male		83.91 million	
Female		87.09 million	
Key Demographic Characteristics			
Population Density	1,171 per sq. km	Sex Ratio (M/F*100)	96.3
Annual Population Growth Rate (%)	0.69	Intersensal Growth Rate (%)	1.12
Median Age of the Population (year)		Child-Woman Ratio	
Both Sex	26	Total	371
Male	25	Rural	387
Female	27	Urban	325
Dependency Ratio (%)			
Total	53.7		
0-14 yrs	44.2		
65+ yrs	9.4		
Rural (total)	55.7		

According to Census 2022, out of the total population, the population living in slum areas is 1.05% which is nearly doubled as Census 2001. The floating population witnessed a significant decline from 839,442 in 1981 to 22,185 in 2022. Special health measures must be taken to these group of population.

The trend of intercensal growth rate of population across the previous census after independence shows a decreasing pattern (Fig 1.1). In 2023, the annual growth rate is 0.69%, where the average growth rate of the world is 1.14%. The population density increased to 1,171 from 484 per square kilometer over the past 50 years. The most and the least densely populated divisions are Dhaka and Barishal, respectively. The sex ratio is declined to 96.3 in 2023 from 108 in 1974. It is observed from the analysis that at the national level, the highest, 10.50% of the total population belong to the age of 0-4 years next to the age-group of 15-19 years (10.1%).

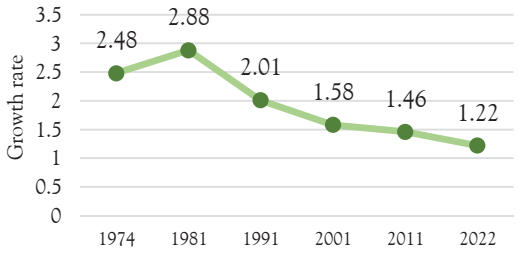

Figure 1.1. Intercensal growth rate of population

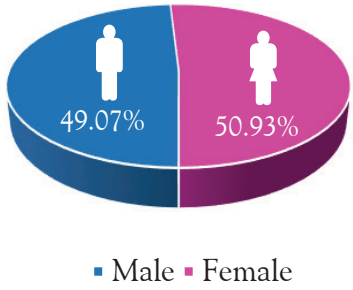

Figure 1.2. Male-Female ratio of total population 2023

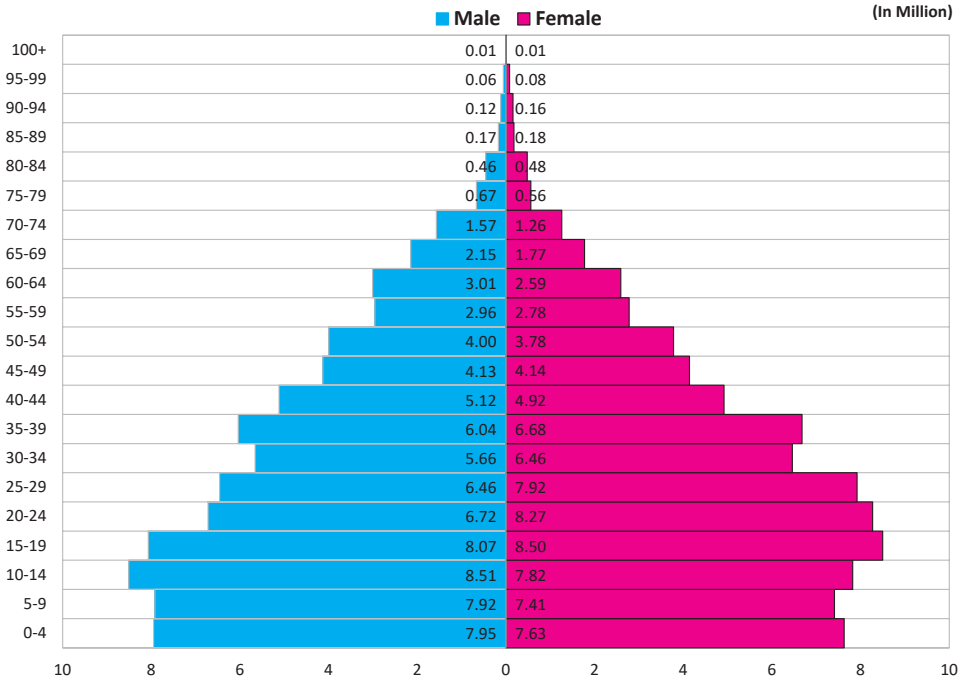

Figure 1.3. Age-Sex population pyramid 2023

At the national level, out of the population aged 10 years and above, the currently married population is 65.08% and the never married 28.82%. The mean age at marriage for males and females is 25.28 and 19.29 years, respectively, at the national level.

Table 1.3. Marriage, divorce, and separation in Bangladesh in 2023	
Marriage, Divorce and Separation	
Crude Marriage rate (per 1000 population)	
Total	15.7
Rural	16.8
Urban	12.0
Marital Status of Population aged 10+ (percent)	
Never Married	Male: 35.8 Female: 21.7
Currently Married	Male: 62.2 Female: 65.6
Widowed/Separated/ Divorced	Male: 2.0 Female: 12.7
Mean Age at First Marriage	
Rural	Male: 25.3 Female: 18.5
Urban	Male: 26.3 Female: 20.4
Early/Child Marriage (among 20-24 years women) in percent	
Before age 15	Rural: 8.8 Urban: 6.8
Before age 18	Rural: 44.4 Urban: 33.5
Crude Divorce Rate (per 1000 population)	
Total	1.1
Rural	1.1
Urban	0.9
Crude Separation Rate (per 1000 population)	
Total	0.26
Rural	0.28
Urban	0.22

Table 1.4. Fertility and pregnancy in Bangladesh during 2023	
Fertility	
Crude Birth Rate (per 1,000 population)	
Total	19.4
Male	20.4
Female	18.5
Rural (total)	20.2
Urban (total)	17.0
Total Fertility Rate (per woman aged 15-49)	
Total	2.17
Rural	2.31
Urban	1.78
General Fertility Rate	
Total	68
Rural	72
Urban	57
Gross Reproduction Rate	
Total	1.07
Rural	1.14
Urban	0.86
Net Reproduction Rate	
Total	1.06
Rural	1.12
Urban	0.86
Pregnancy	
Type of Delivery (percent)	
Normal	National 49.3 Rural 51.6 Urban 40.9
C-section	National 50.7 Rural 48.4 Urban 59.1
Place of Delivery (percent)	
Home	32.77
Table 1.4 contd.	

Table continued...	
Public Facilities	26.43
Private Facilities	39.76
NGO Facilities	0.99
Others/Transport	0.05
Birth Registration of resident population (%)	
Total	63.36
Rural	63.88
Urban	61.68
Antenatal Care Service Seeking (National) (%)	
Not at all/None	2.07
Once	6.44
Twice	23.54
Thrice	28.88
Four or more	39.08

Institutional deliveries are observed more in urban areas. One-third of total delivery still occurs at home, while private facilities contribute more in institutional delivery (Fig 1.4). See chapter 4.1 for the details.

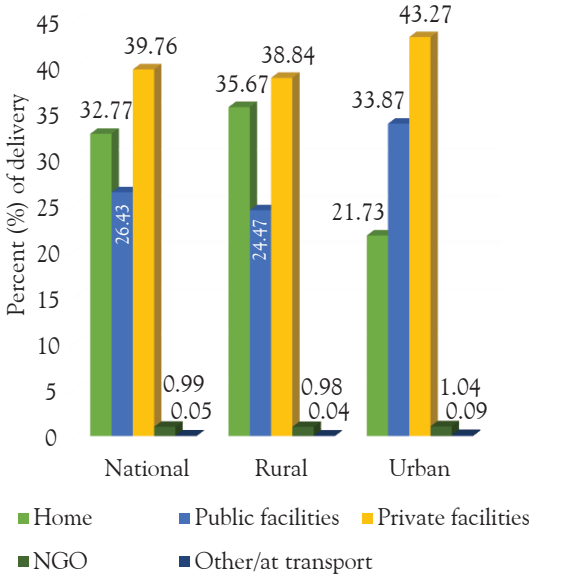

Figure 1.4. Place of delivery

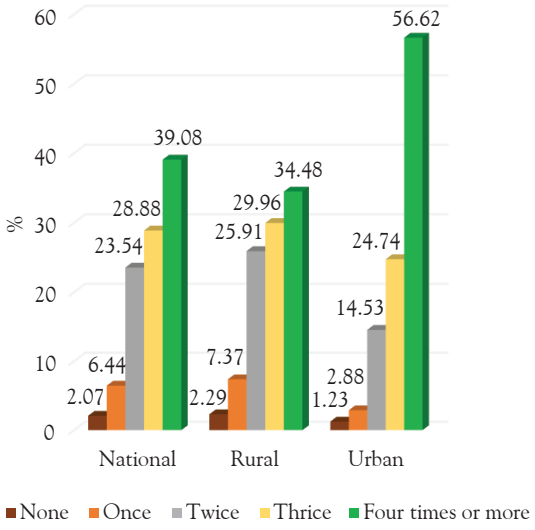

Figure 1.5. ANC service seeking

Most of the pregnancies occur between 15 and 34 years of age, peaking in the 20-24 age group (Fig 1.6).

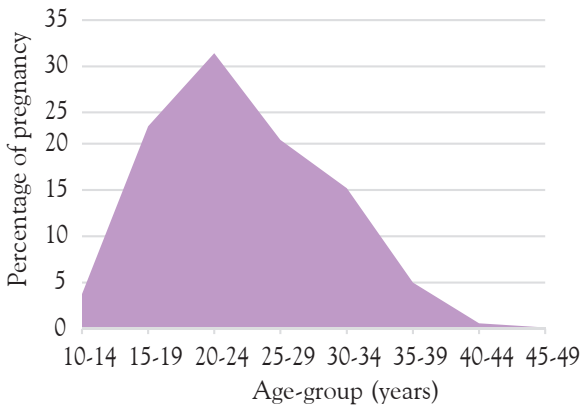

Figure 1.6. Proportion of pregnancy by age group

Analysis shows that the trends of all mortality data exhibit a consistently decreasing pattern.

Table 1.5. Mortality data of Bangladesh in 2023	
Mortality	
Crude Death Rate (per 1000 population)	
National	6.1
Male	6.8
Female	5.5
Infant Mortality Rate	
Total (both sex)	27
Male	30
Female	24
Rural	28
Urban	24
Neonatal Mortality Rate	
Total (both sex)	20
Male	22
Female	17
Rural	20
Urban	16
Under-5 Mortality Rate	
Total (both sex)	33
Male	35
Female	30
Rural	34
Urban	30
Maternal Mortality Ratio (per 1000000 live births)	
Total	136
Rural	157
Urban	56 (inadequate data)
Life Expectancy at Birth (years)	
Both Sex	72.3
Male	70.8
Female	73.8

In 2023, Bangladesh's crude death rate was 6.1 per 1,000, higher among males than females. The infant mortality rate stood at 27 per 1,000 live births, with higher deaths in rural areas and among boys. The neonatal mortality rate was 20, showing that most infant deaths occur within the first month. The maternal mortality ratio remained at 136 per 100,000 live births, significantly higher in rural settings. Life expectancy reached 72.3 years, with females living about three years longer than males. Overall, mortality indicators reflect steady improvement but continued rural and gender disparities.

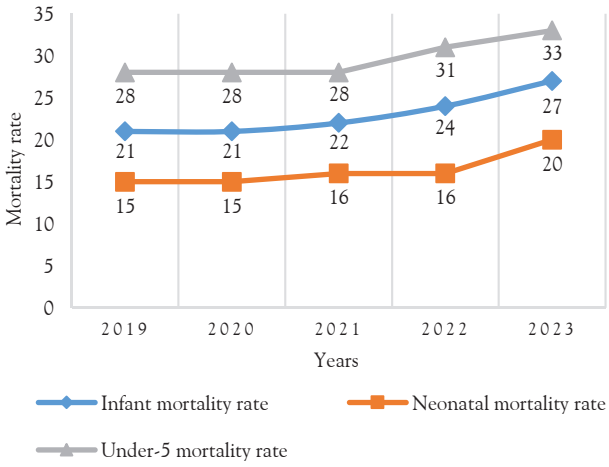

Figure 1.7. Trends of the mortality rate

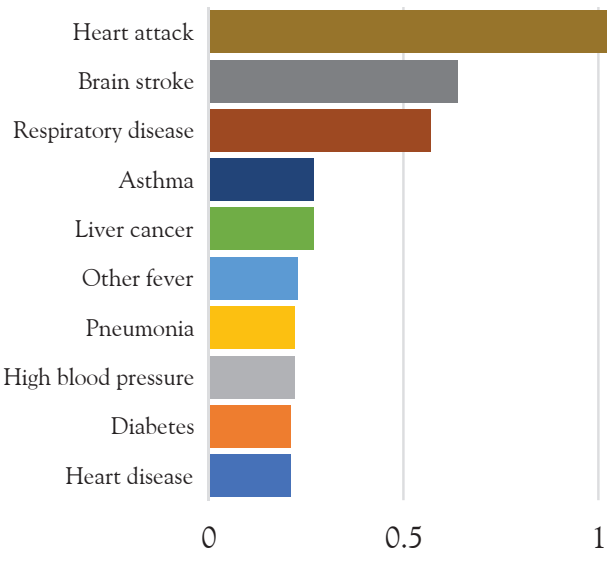

Figure 1.8. Top ten causes of death in community

Figure 1.8 illustrates the top ten causes of death per 1000 population in 2023, which is represented in SVRS key findings 2023. The details about mortality and morbidity are discussed in the chapter 6 of this bulletin.

Table 1.6. Contraceptive usage in Bangladesh, 2023	
Contraceptive Usage	
Contraceptive Prevalence Rate (percent)	
Total	62.1
Rural	61.6
Urban	63.9
Contraceptive Prevalence Rate by Method (percent)	
Any method	62.1
Modern method	61.0
Traditional method	1.1
Unmet need for Family Planning (percent)	
Total need	15.57
For birth spacing	7.66
For birth limiting	7.91

Table 1.7. Disability in 2023	
Disability	
Crude Disability Rate (per 1000 population)	
Both sex	28.2
Male	28.6
Female	27.8

Table 1.8. Household characteristics and utilities in Bangladesh, 2023	
Household characteristics and utilities	
[Source: PHC 2022 National Report, vol 1, BBS; SVRS, BBS 2023; HIES, 2022]	
Number of households	
National	41.01 million
Rural	27.82 million
Urban	13.19 million
Household size	
Rural	4.2
Urban	4.1
Headship (percent)	
Male-headed	81.1
Female-headed	18.9
Table 1.8 contd.	

Table continued...	
Average monthly household income (BDT)	
National	32,422
Rural	26,163
Urban	45,757
Average monthly household expenditure (BDT)	
National	31,500
Rural	26,842
Urban	41,424
Percentage share of food and non-food consumption	
Food	45.76
Non-food	54.24
Per-capita daily intake (gram) of major food items	
National	1129.8
Rural	1125.4
Urban	1139.4
Per-capita daily calorie intake (K.cal)	
National	2393.0
Rural	2424.2
Urban	2324.6
Source of Electricity (percent)	
National grid	97.54
Solar	1.81
Other	0.09
No electricity	0.56
Ownership of Mobile Phone (%) (15+ yrs)	
Total	74.2
Male	86.5
Female	62.8
Rural	71.6
Urban	82.7
Using the Internet (%) (15+yrs)	
Total	50.1
Male	58.0
Female	42.6
Rural	46.1
Urban	62.7

In 2023, Bangladesh had 41 million households, with two-thirds located in rural areas. The average household size was around 4 persons, slightly smaller in urban areas. Male-headed households comprised 81%, while female-headed households accounted for 19%.

Urban–rural gaps remain prominent in income and expenditure: average monthly income was BDT 45,757 in urban areas versus BDT 26,163 in rural areas. Food consumption accounted for 46% of total expenditure, reflecting the gradual diversification of spending.

Electricity coverage reached over 97%, largely from the national grid, with minimal reliance on solar or other sources. Mobile phone ownership was widespread (74%), though lower among rural residents and women. Internet use reached 50% overall, higher in urban areas (63%) and among males (58%), indicating steady progress toward digital inclusion despite persistent gender and rural divides.

Table 1.9. Health-related behaviors in Bangladesh, 2023

Main sources of drinking-water (%) (FSS, BBS 2023)	
Tubewell (Deep/Shallow/ Submersible)	89.54
Supply-water (pipeline)	8.38
Open water bodies	1.12
Bottle/Jar	0.48
Others	0.47
Toilet facilities (SVRS 2023)	
Improved toilet facilities (%)	93.63
Shared (%)	25.9

Hand-washing facilities (%) (SVRS 2023)	
Having both soap and water	65.2
Having only soap	1.2
Having only water	16.2
No facility/No soap and water	17.4

In 2023, tubewells remained the dominant source of drinking water for nearly 90% of households, while only 8% relied on piped supply. Access to improved sanitation facilities was high at 93.6%, though 26% of households shared toilets. Regarding hygiene practices, 65% of households had both soap and water for handwashing, but 17% lacked adequate facilities, indicating scope for further improvement in hygiene behaviour.

Table 1.10. Literacy and education in Bangladesh, 2023

Literacy, and Education	
Literacy Rate of Population 7+ years (percent)	
Total	77.9
Male	80.1
Female	75.8
Rural	75.5
Urban	85.4
Type of educational institute attending (%)	
Government	46.86
MPO	27.68
Non-MPO	13.96
Non-formal	6.50
Others	4.99
Dropout from education without competition (5-24 yrs)	
Yes	9.36
No	90.64

In 2023, the literacy rate among the population aged 7 years and above reached 77.9%, higher for males (80.1%) than for females (75.8%), and notably higher in urban areas (85.4%) than in rural areas (75.5%). Nearly half of the students attended government institutions, followed

by MPO-affiliated schools (28%). Only 9% of youths (5–24 yrs) dropped out before completing education, indicating steady progress in educational retention and gender parity, though urban–rural gaps persist.

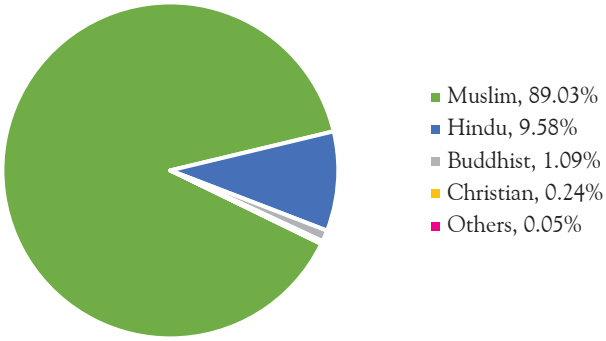

Figure 1.9. Percent population by religion in Bangladesh

Table 1.11. Economy and health status in Bangladesh	
MOHFW Budget as % of national budget	5.20%
Allocation of the total budget to the health sector in crore BDT	41,407
Bangladesh National Health Accounts (BNHA 1997-2020)	
Current health expenditure in 2020 (% of GDP)	2.6%
Total health expenditure in 2020 (% of GDP)	2.8%
Out-of-pocket expenditure (Household)	68.5% of THE
Per capita total health expenditure (USD)	54

In FY 2024–2025, the health sector received 5.2% of the national budget, while total health expenditure stood at 2.8% of GDP, with 68.5% paid out-of-pocket. Per-capita spending was USD 54, highlighting the need for greater public investment and financial protection in health.

Table 1.12. Health workforce in Bangladesh up to December 2024	
Health Workforce	
[DGHS]	
No. of registered physicians	156750
MBBS	141700
BDS	15050
Postgraduate physicians	22460
Doctors working under DGHS	29150
Registered physicians per 1000 population	0.92
Population per registered physician	1091
Population per physician working under DGHS	5866
No. of registered nurses	107047
Registered nurses per 1000 population	0.63
Population per registered nurse	1597
No. of government medical technologists	6608

As of 2024, Bangladesh had 156,750 registered physicians, including 141,700 MBBS and 15,050 BDS doctors, with 22,460 holding postgraduate qualifications. Only 29,150 doctors served under DGHS, translating to 0.92 physicians per 1,000 population nationally, but just one DGHS doctor per 5,866 people. The country also had 107,047 registered nurses—0.63 per 1,000 population—and 6,608 government medical technologists. The data highlights a persistent shortage and maldistribution of health professionals, particularly in public facilities, underscoring the need for strategic workforce deployment and retention policies.

Table 1.13. Health services and medical education in Bangladesh up to December 2024	
Health Services and Medical Education	
[DGHS, BMDC, BNMC]	
Total hospital beds (govt.) (MIS, DGHS)	71962
Population per hospital bed	2376
Medical universities (DGME)	5
Postgraduate medical teaching institutes (DGME)	39
Medical colleges (government and private) (DGME)	104
Dental colleges/unit (DGME)	34
Army and AFMC (DGME)	6
Institute of Health Technology (DGME)	120

Bangladesh's public health infrastructure in 2023 included 71,962 government hospital beds, providing roughly one bed for every 2,376 people. The country had 5 medical universities, 39 postgraduate institutes, and 104 medical colleges, along with 34 dental colleges or units and 6 military institutions. In addition, 120 Institutes of Health Technology (IHTs) supported paramedical education. These figures reflect steady expansion in medical education and training capacity, though the bed-to-population ratio remains below international standards, underscoring the need for further investment in hospital infrastructure and workforce development.

Reference

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- Bangladesh National Health Accounts (BNHA 1997-2020)

Health System of Bangladesh

Executive Summary

The health system of Bangladesh is an integrated network comprising public, private, and NGO providers delivering care from the community to tertiary levels. The Ministry of Health and Family Welfare (MOHFW) formulates policy and supervises implementation through its two administrative wings — the Health Services Division and the Medical Education and Family Welfare Division.

Within the Health Services Division, the Directorate General of Health Services (DGHS) remains the largest operational agency, overseeing service delivery, human resources, and health information systems across six administrative tiers — national, divisional, district, upazila, union, and ward.

As of 2024, DGHS continues to expand its institutional and digital capacities to ensure universal access to quality health services through improved coordination, real-time data management, and equitable deployment of health personnel nationwide.

Background and Strategic Objectives

Background

Bangladesh's health system evolved through successive reforms focusing on decentralization, community participation, and integration of preventive and curative services. The system's guiding philosophy remains the achievement of Universal Health Coverage (UHC) and the Sustainable Development Goals (SDG 3) by 2030.

Strategic Objectives

- Strengthen the stewardship role of MOHFW and DGHS for effective policy execution and inter-directorate coordination.
- Ensure equitable access to healthcare across all geographic regions and socioeconomic groups.
- Expand institutional capacity through modernization of infrastructure, digital transformation, and governance reforms.
- Enhance workforce efficiency through HRIS-driven planning, training, and monitoring systems.
- Foster collaboration among the public, private, and NGO sectors to build a responsive and resilient national health system.

Current Status and Trends

The Ministry of Health and Family Welfare (MOHFW) provides policy direction and is composed of two functional divisions: the Health Services Division (focusing on service delivery, health policy, and financing) and the Medical Education and Family Welfare Division (responsible for medical education and family planning).

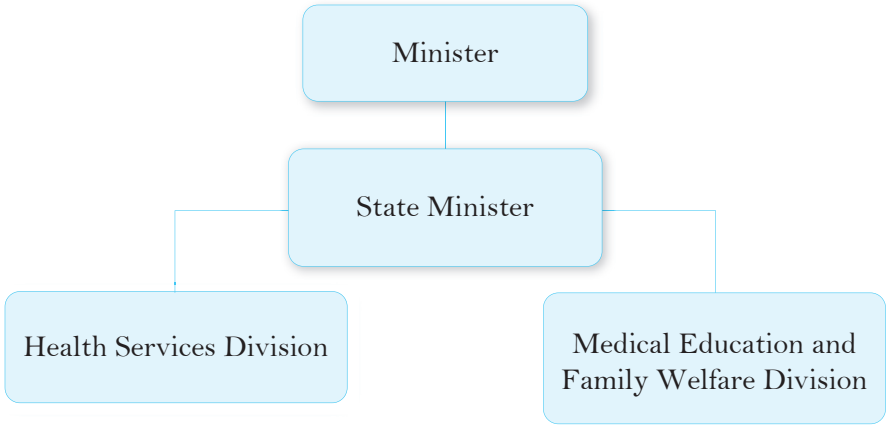


Figure 2.1. Divisions of the MOHFW

Figure 2.1 outlines the structural bifurcation of the MOHFW into two divisions — Health Services and Medical Education & Family Welfare — under the leadership of the Hon'ble Minister and State Minister. This separation enhances administrative focus and accountability for both service delivery and education-related functions.

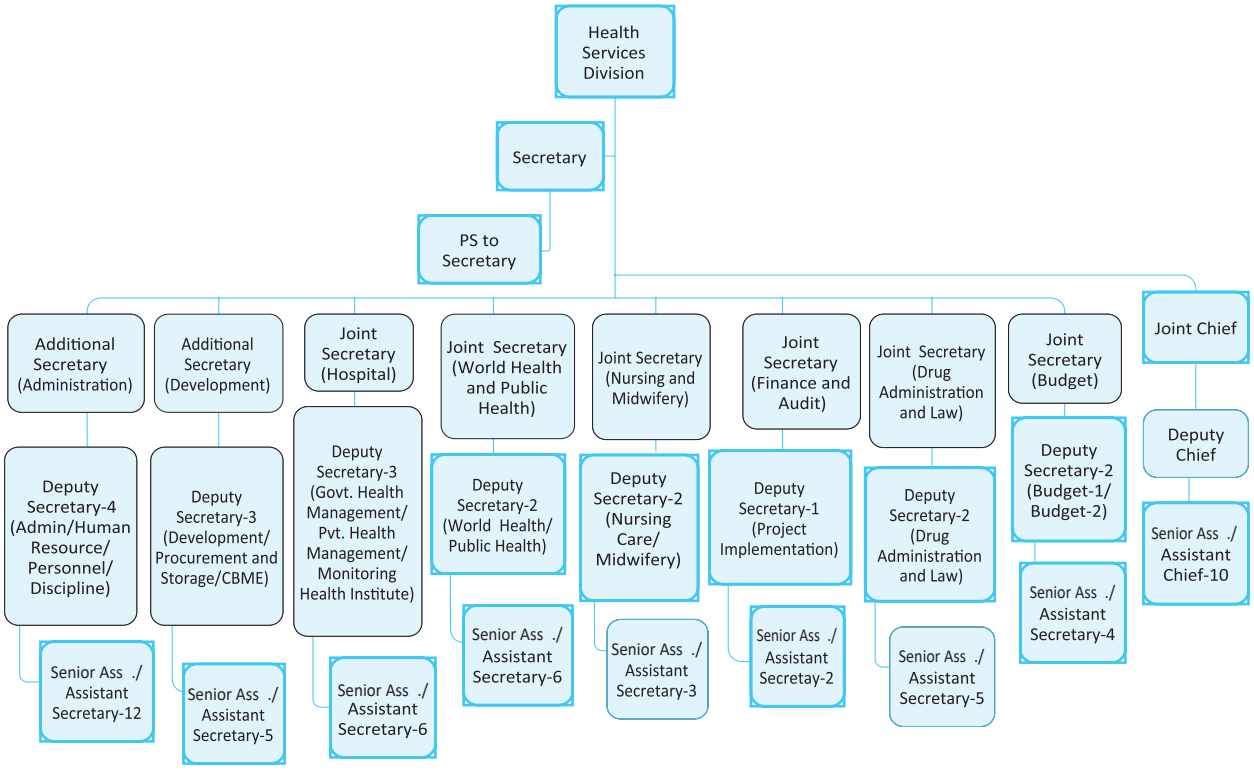


Figure 2.2. Hierarchy of Personnel in the Health Services Division

Figure 2.2 depicts the administrative hierarchy within the Health Services Division, beginning with the Secretary, Additional Secretaries, Joint Secretaries, and successive levels of Deputy Secretaries, Senior Assistant Secretaries, and Assistant Secretaries. The structure reflects a tiered decision-making process, ensuring efficient supervision of DGHS and other directorates.

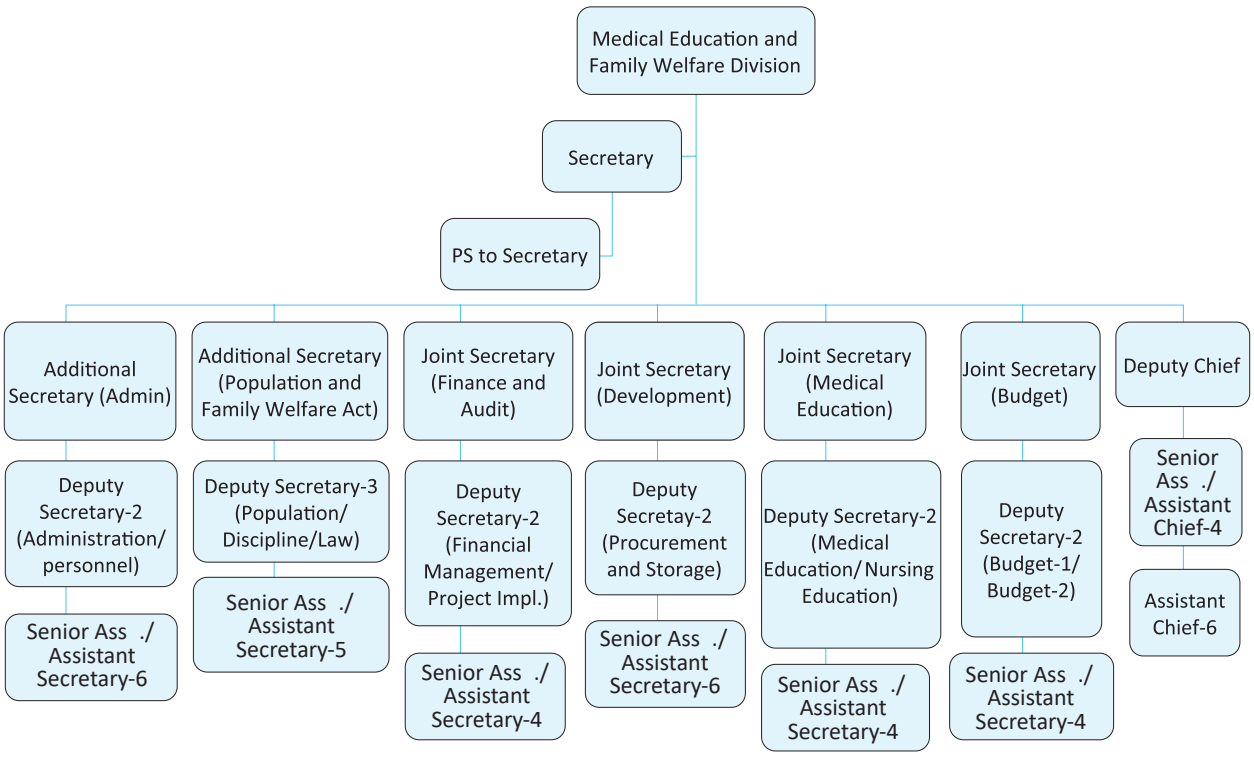


Figure 2.3. Hierarchy of personnel in the Medical Education and Family Welfare Division

Figure 2.3 presents the organizational layout of the Medical Education and Family Welfare Division. It highlights the administrative chain responsible for regulating medical education, coordinating with DGME and DGFP, and overseeing professional councils to maintain quality standards in medical and allied health training.

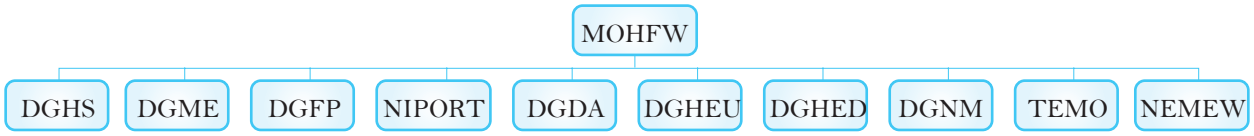


Figure 2.4. Regulatory Bodies under the MOHFW

Figure 2.4 enumerates the technical directorates and agencies under MOHFW, including DGHS, DGME, DGFP, NIPORT, DGDA, DGNM, and others. Each body has specialized mandates — ranging from medical education to drug regulation — collectively forming the operational backbone of Bangladesh's health administration.

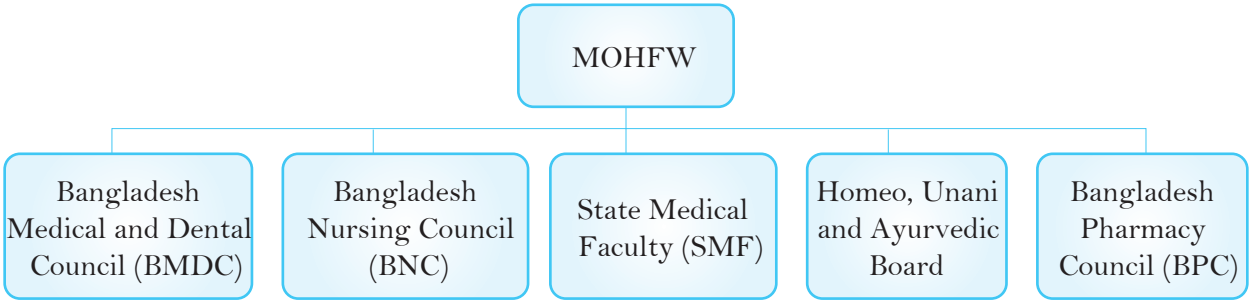


Figure 2.5. Professional and Accreditation Councils

Figure 2.5 identifies the professional councils and regulatory boards such as BMDC, BNC, SMF, the Homeo-Unani-Ayurvedic Boards, and BPC. These entities ensure quality assurance, licensing, and ethical practice across medical, nursing, pharmacy, and traditional medicine professions.

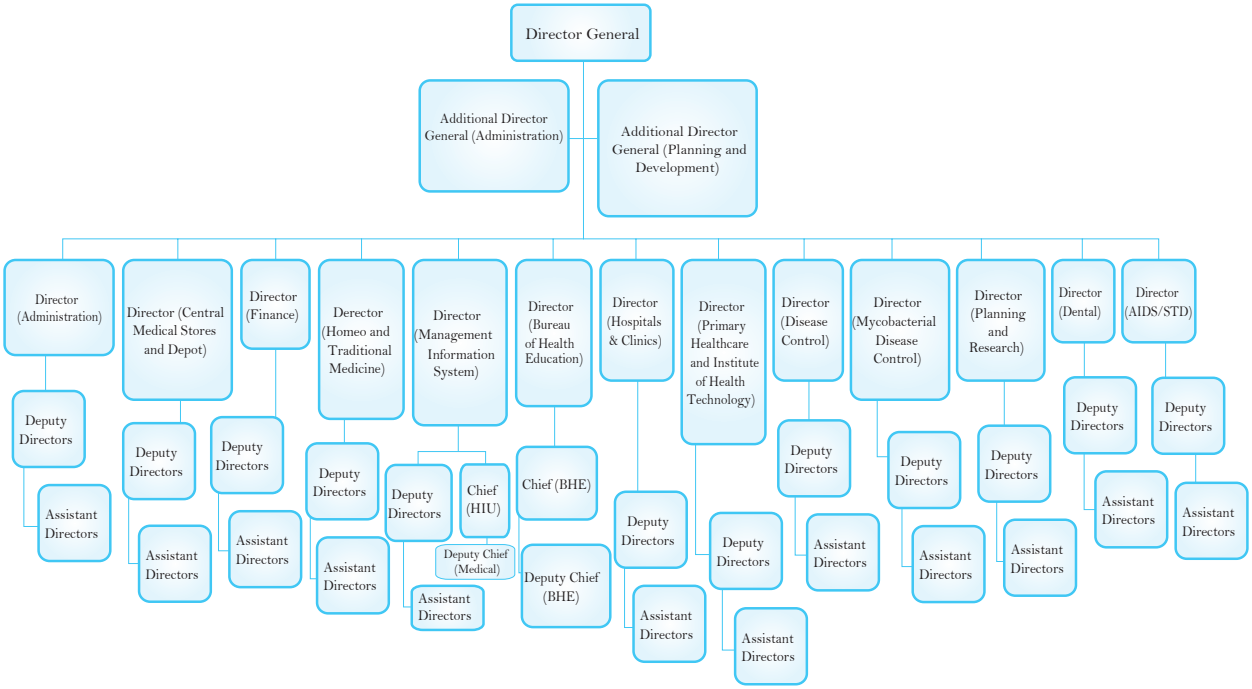


Figure 2.6. Hierarchy of Personnel in the Directorate General of Health Services

Figure 2.6 shows the DGHS organizational framework led by the Director General, supported by Additional Director Generals for Administration, Planning & Development, and multiple Directors responsible for specialized program areas (e.g., Disease Control, Primary Health Care, Administration, Finance, MIS etc.). This structure facilitates both vertical program management and horizontal coordination across services.

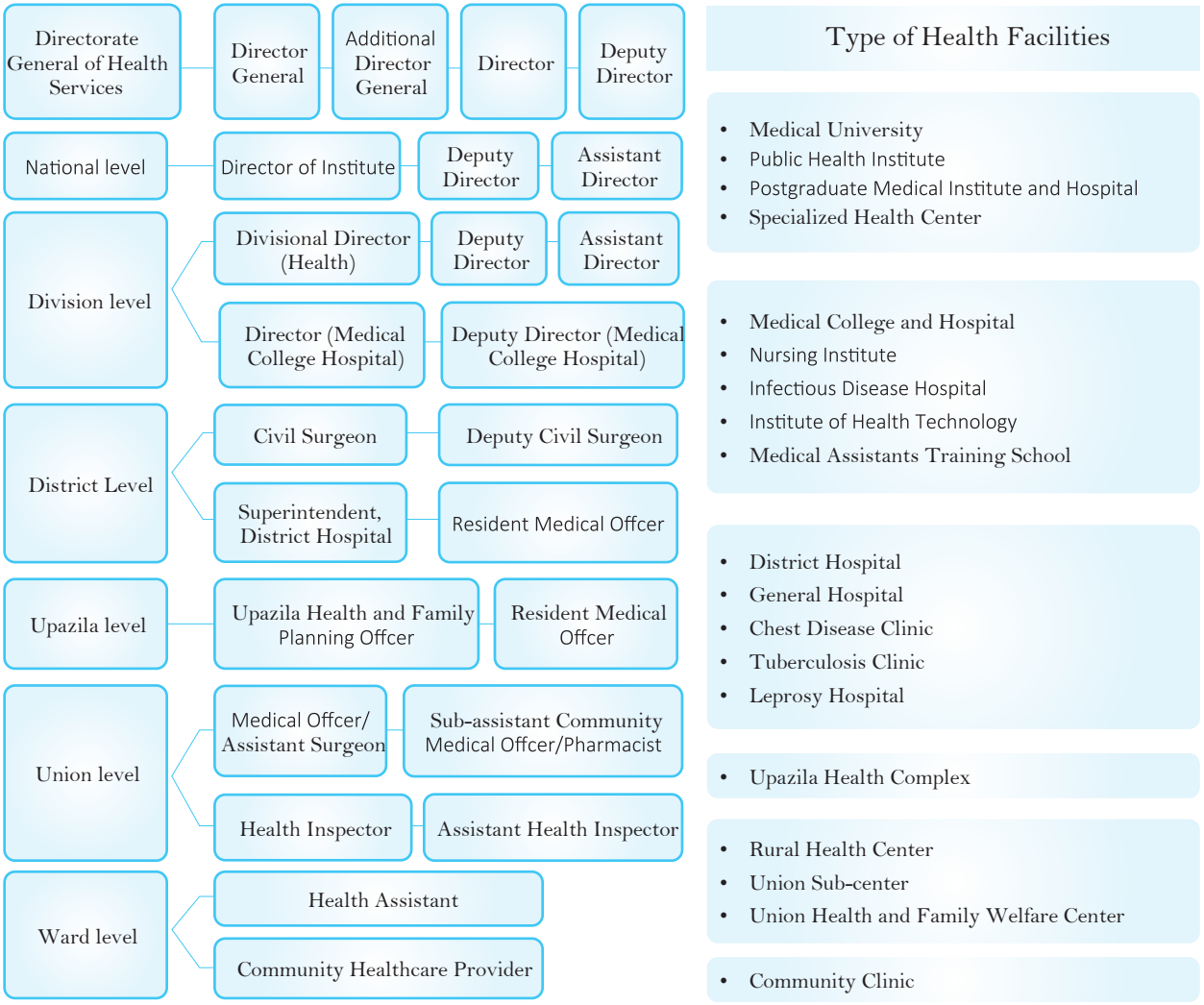


Figure 2.7. Managerial Hierarchy from National to Ward Level

Figure 2.7 illustrates the command chain from the DGHS headquarters down to the ward level. It demonstrates how authority transitions from the Director General to Divisional Directors, Civil Surgeons, Upazila Health and Family Planning Officers (UHFPOs), and ultimately to community health workers. This hierarchical linkage ensures program implementation and reporting integrity across tiers.

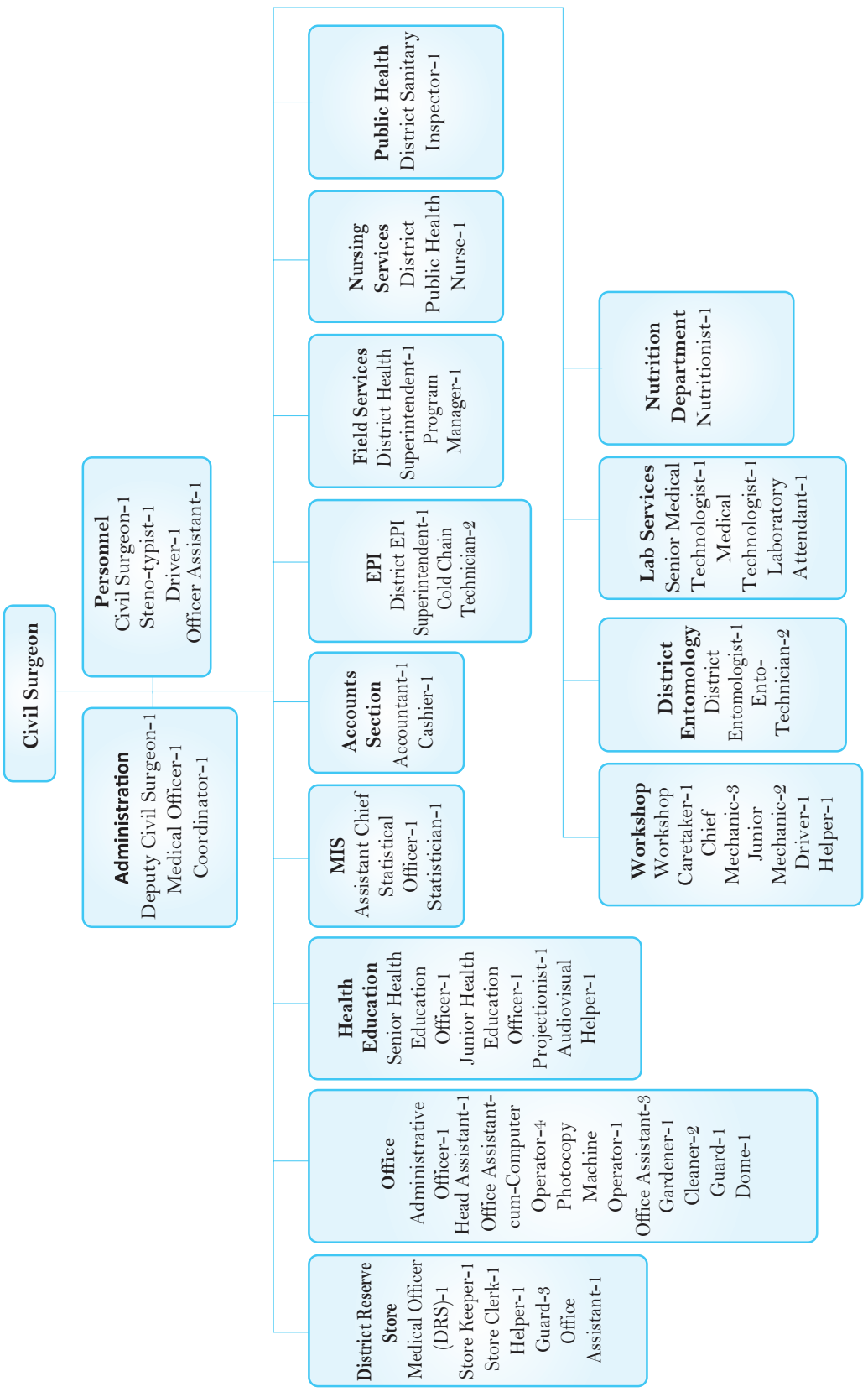


Figure 2.8. Organogram of the Civil Surgeon's office

Figure 2.8 details the functional units within the Civil Surgeon's Office, including administrative, MIS, laboratory, EPI, entomology, and nutrition sections. It demonstrates the multidimensional managerial scope of district-level health administration responsible for supervision, logistics, disease surveillance, and coordination of all public health programs within the district.

Figure 2.9. Placement of personnel in 250-Bed Hospitals

Figure 2.9 outlines the sanctioned staffing pattern for a 250-bed district hospital. It illustrates the multidisciplinary composition including clinical specialists, consultants, nurses, technologists, administrative, and support personnel. The structure demonstrates how tertiary-level hospitals maintain comprehensive service coverage through specialized departments such as surgery, obstetrics-gynecology, pediatrics, anesthesia, and diagnostic units.

Figure 2.10. Placement of personnel in 100-Bed Hospitals

Figure 2.10 depicts human-resource allocation in a 100-bed facility. Staffing is scaled down from the 250-bed model but retains all essential clinical, diagnostic, and administrative functions. This standardized setup ensures continuity of essential and emergency services at secondary-level hospitals.

Figure 2.11. Placement of personnel in 50-Bed Hospitals

Figure 2.11 illustrates the service organization of a 50-bed upazila-level hospital. It highlights the integrated role of Upazila Health and Family Planning Officers (UH&FPOs) in managing both inpatient and outpatient services along with domiciliary, health-education, and disease-control activities.

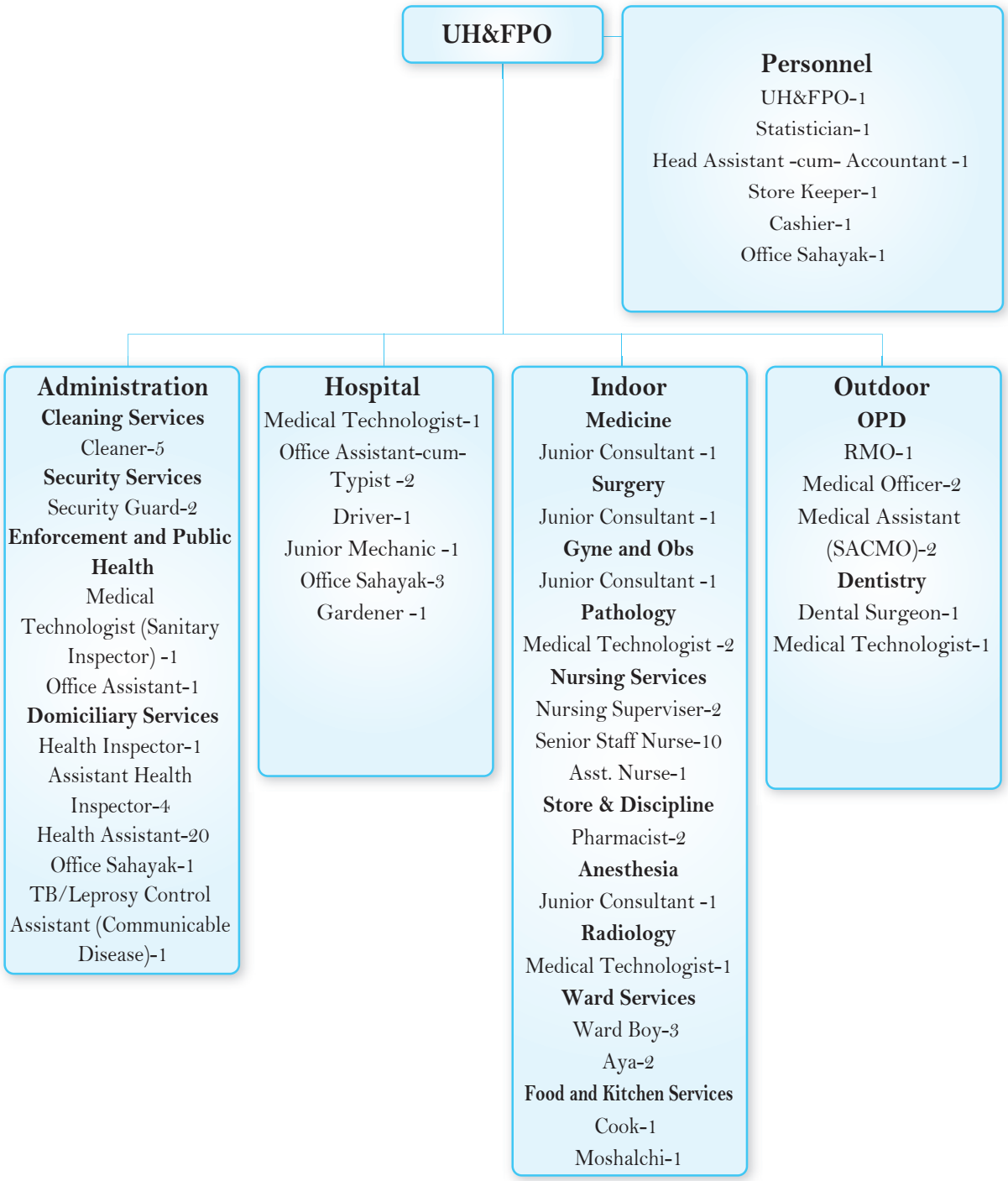


Figure 2.12. Placement of personnel in 31-Bed Hospitals

Figure 2.12 presents the staffing pattern of 31-bed hospitals, representing small upazila complexes that deliver essential obstetric, surgical, and medical services. Despite limited capacity, these units act as critical referral points between union-level facilities and higher tiers.

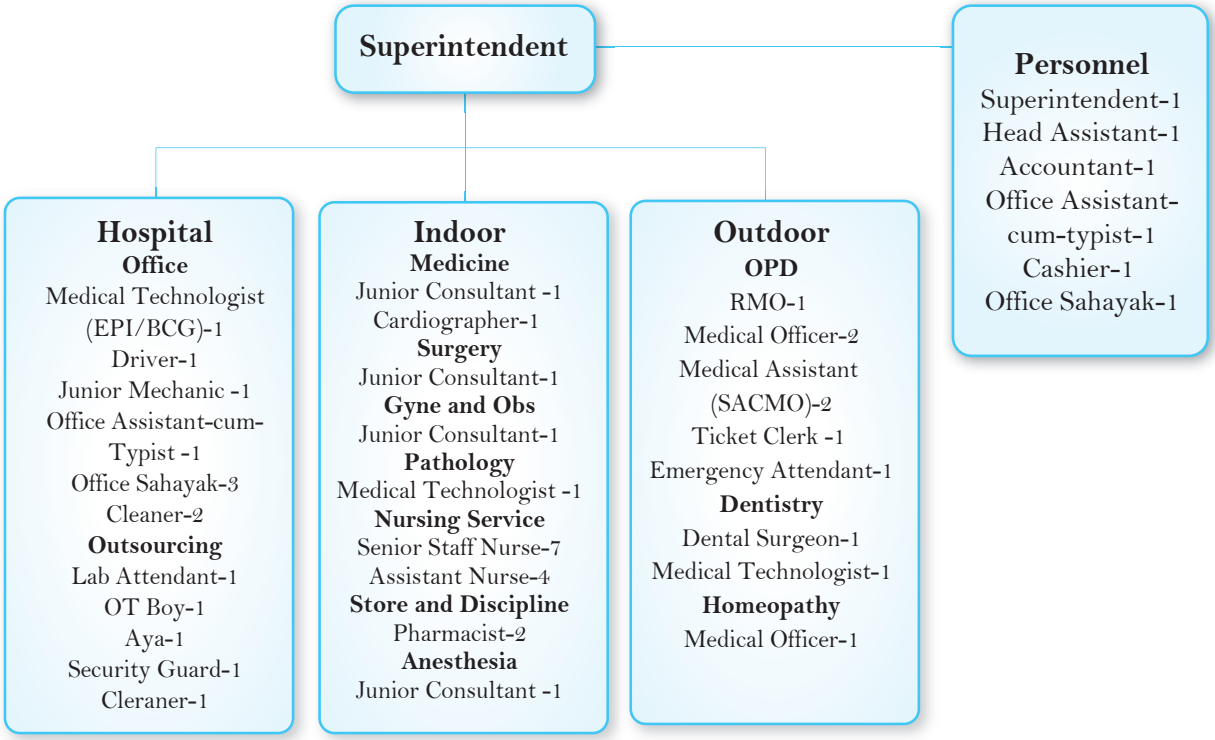


Figure 2.13. Placement of personnel in 30-Bed Hospitals

Figure 2.13 displays the typical human-resource configuration of 30-bed hospitals, mainly located in newly upgraded or remote upazilas. The simplified staffing mix focuses on basic clinical care, maternal-child health, and diagnostic support to sustain local accessibility.

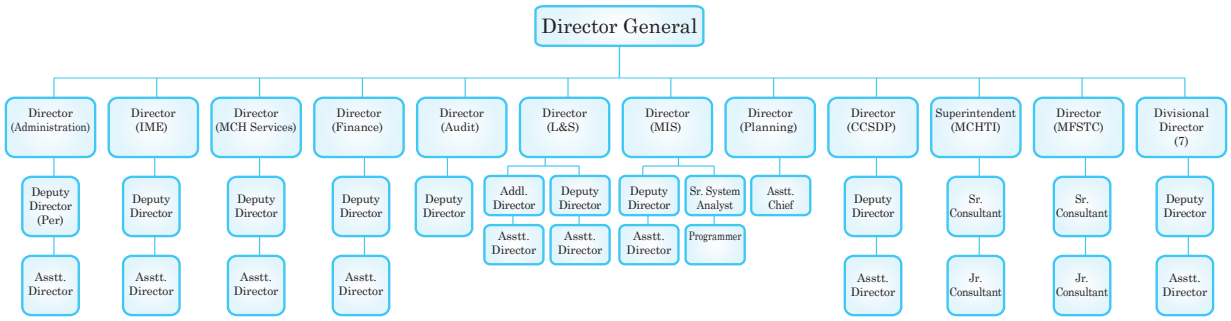


Figure 2.14. Hierarchy of personnel in the Directorate General of Family Planning (DGFP)

Figure 2.14 portrays the administrative and programmatic hierarchy within DGFP, including Director Generals, Additional Directors General, Directors of key wings (Administration, MIS, Planning, MCH Services, Logistics), and divisional structures. This figure underscores DGFP's complementary role to DGHS in implementing reproductive-health and family-planning programs nationwide.

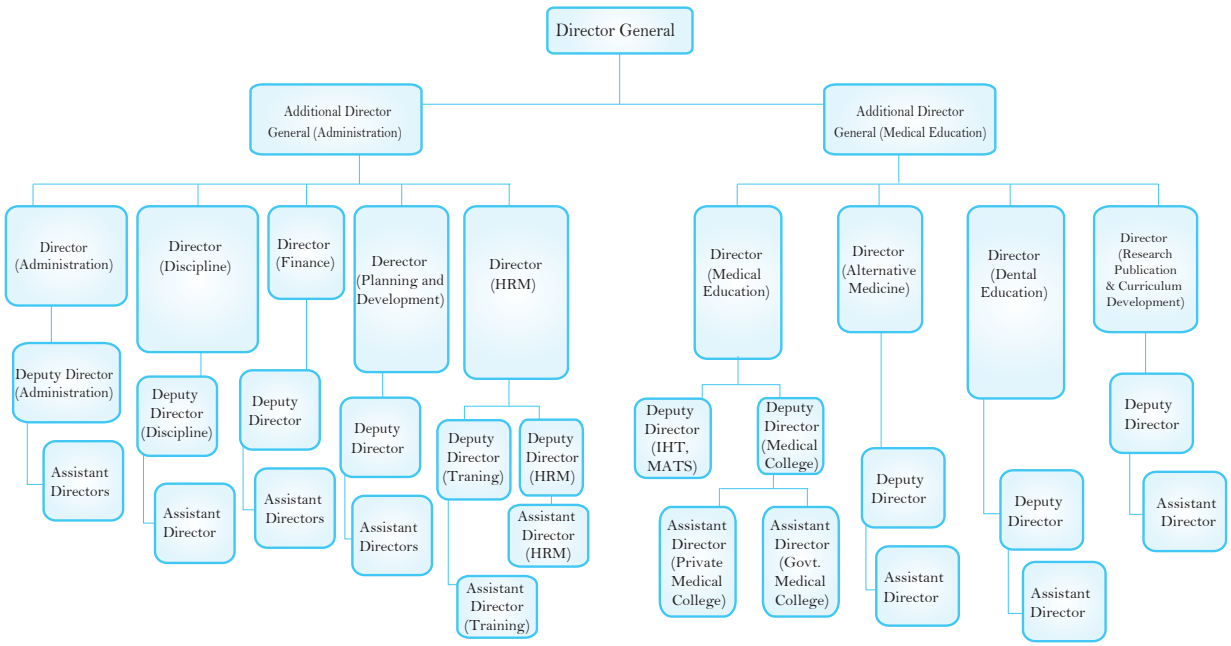


Figure 2.15. Hierarchy of personnel in the Directorate General of Medical Education (DGME)

Figure 2.15 illustrates the DGME organizational setup, showing leadership by the Director General supported by Additional Directors General and Directors overseeing medical, dental, alternative, and nursing education. It defines administrative pathways for academic regulation, curriculum development, and institutional accreditation.

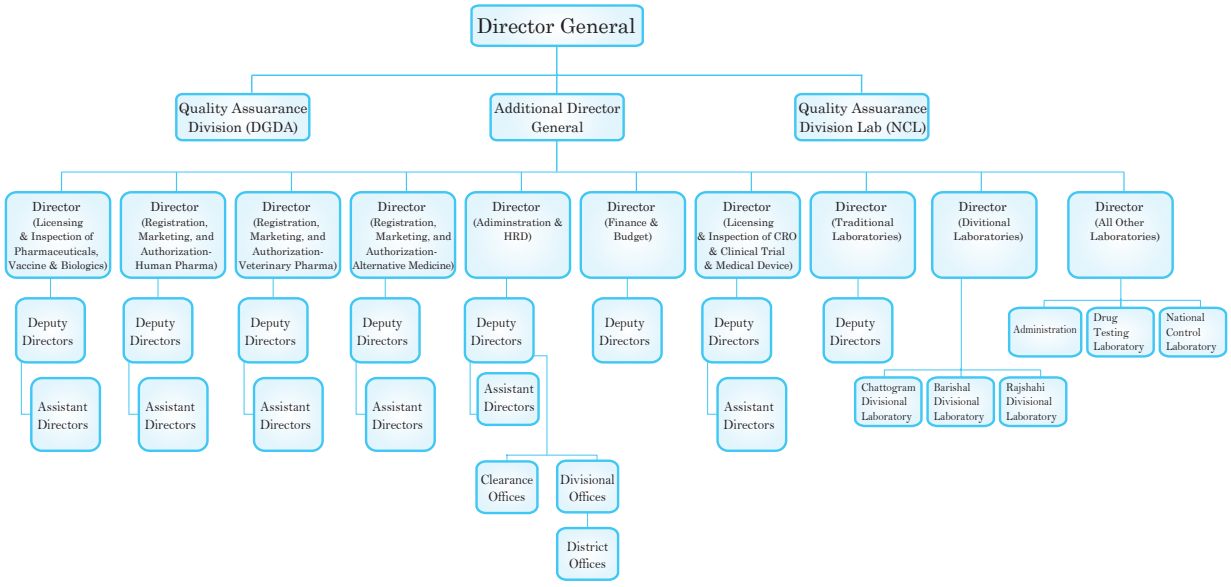


Figure 2.16. Hierarchy of personnel in the Directorate General of Drug Administration (DGDA)

Figure 2.16 presents the functional framework of DGDA, highlighting divisions for licensing, inspection, quality assurance, laboratory control, and regional field offices. This structure ensures effective regulation of pharmaceuticals, vaccines, biologics, and medical devices across Bangladesh.

Key Findings

- Bangladesh's health system demonstrates a robust administrative chain extending from national to ward level, ensuring uniform program implementation.
- Specialized directorates (DGHS, DGFP, DGME, DGDA, DGNM) together create a comprehensive institutional ecosystem.
- Despite wide coverage, infrastructure-to-staff ratios vary, leading to resource constraints in peripheral areas.
- Coordination between service-delivery and education directorates is essential to maintain workforce quality and balance.

Program Implementation Highlights

- The health system follows a combined bottom-up and top-down approach in both policy formulation and implementation. Local-level feedback informs strategic decisions at the central level, while national policies guide service delivery, ensuring integrated governance loop across all tiers.
- Efforts are underway to strengthen primary and secondary care facilities to ensure optimum utilization of resources, improve referral efficiency, and reduce patient congestion at tertiary-level hospitals.
- Inter-directorate coordination among DGHS, DGFP, DGME, DGNM, and DGDA has been enhanced to promote joint planning, shared logistics, and integrated monitoring mechanisms.
- Evidence-based decision-making is being institutionalized through real-time health data integration across HRIS, DHIS2, and e-MIS platforms, enabling performance tracking and targeted interventions.
- Health facility standardization and rational resource allocation are being implemented to align infrastructure and human resources with service demand at each level.
- Community engagement and local accountability frameworks are being reinforced to ensure responsiveness to population health needs and equitable access.
- The Government continues to collaborate with NGOs, development partners, and the private sector for policy support, training, and innovation in service delivery.
- Ongoing initiatives emphasize digital transformation, capacity building, and decentralized management, fostering a more efficient, data-driven, and resilient health system.

Recommendations

1. Develop a National Health Systems Strengthening Framework consolidating governance, financing, and service-delivery reforms.
2. Establish integrated planning between DGHS, DGFP, DGME, and DGDA to ensure coherence across preventive, clinical, educational, and regulatory domains.
3. Strengthen district-level autonomy for adaptive management within national policy parameters.
4. Institutionalize digital health governance, mandating data interoperability among all directorates.
5. Conduct regular functional reviews of hospital staffing structures to match evolving service demands.

Technical Notes

- Primary sources: MOHFW Annual Reports, DGHS MIS data 2024, and relevant policy documents.
- Figures 2.1–2.16 reproduced from official organizational charts validated by respective directorates.
- The current structure reflects reforms implemented up to December 2024.

References

1. MOHFW Administrative data, 2024.
2. HRIS, MIS, DGHS database, 2024.
3. Bangladesh Health Facility Registry Report, 2024.
4. Health Services Division and Medical Education Division organizational records, MOHFW 2024.

Rights, Acts, and Policies for Health

Overarching foundation: Equitable healthcare for all

Executive Summary

Bangladesh's health system is anchored in the constitutional recognition that health is a basic human right and a core responsibility of the State. Over the past five decades, the country has progressively strengthened its health governance, policy frameworks, and institutional capacity to ensure equitable access to quality healthcare for all citizens.

Successive national policies — including the National Health Policy (2011), National Nutrition Policy (2015), and the Bangladesh Digital Health Strategy (2023–2027) — have guided reforms across health service delivery, workforce development, financing, and governance.
The adoption of the Sector-Wide Approach (SWAp) in the late 1990s unified health, nutrition, and population programs under the Ministry of Health and Family Welfare (MOHFW), improving coordination, accountability, and financial efficiency.

Bangladesh continues to modernize its health sector through digital transformation, evidence-based policy review, and expanded social protection measures.
The ongoing focus on primary healthcare revitalization, human resource development, and interoperable digital health systems reflects the nation's commitment to achieving Universal Health Coverage (UHC) and upholding the constitutional right to health through inclusive and sustainable health system reforms.

Background and Strategic Objectives

Background

Since its emergence as an independent nation in 1971, Bangladesh has consistently prioritized the health and well-being of its citizens as a constitutional and developmental obligation. The Constitution of the People's Republic of Bangladesh (1972) recognizes health and medical care as among the basic necessities of life, making it a fundamental responsibility of the State to ensure the welfare of its people through planned development. Articles 15, 16, and 18 clearly outline the State's duty to provide basic necessities, promote nutrition, improve public health, and address disparities between urban and rural populations.

Over the decades, Bangladesh has translated these commitments into a series of national policies, strategies, and institutional frameworks that define the country's approach to healthcare delivery, public health, and population management. The early years of health development were characterized by challenges such as high maternal and child mortality, communicable diseases, and limited service coverage. In response, the Government gradually expanded the health service delivery system from primary to tertiary levels, creating a nationwide network of community clinics, union health facilities, and district hospitals to ensure accessibility at every administrative tier.

To enhance coordination and efficiency, Bangladesh adopted the Sector-Wide Approach (SWAp) in the late 1990s, integrating Health, Nutrition, and Population (HNP) programs into a single strategic framework under the Ministry of Health and Family Welfare (MOHFW). This shift replaced fragmented project-based management with a unified planning and resource allocation model, improving governance, financial management, and accountability.

Over the past two decades, the country has implemented a series of long-term health sector programs, guided by the National Health Policy (2011) and aligned with the Sustainable Development Goals (SDGs). These initiatives have focused on equitable access to essential services, the promotion of primary healthcare, and the modernization of service delivery systems.

Recent policy directions emphasize digital health transformation, human resource development, and social protection in health, supported by the Bangladesh Digital Health Strategy (2023–2027). Together, these frameworks reinforce Bangladesh's commitment to ensuring that every citizen enjoys the constitutional right to health through inclusive, people-centered, and sustainable health system reforms.

Strategic Objectives

- Ensure Universal Health Coverage (UHC) — Guarantee access to quality, affordable, and equitable healthcare for all citizens by 2030.
- Strengthen Primary Healthcare (PHC) — Upgrade community-level facilities (CCs, UHFWCs) with 24/7 service capacity and skilled personnel.
- Modernize Health Governance and Legal Frameworks — Update and enforce laws on communicable diseases, mental health, private institutions, and occupational health.
- Enhance Health Workforce Development — Implement the Bangladesh Health Workforce Strategy (2016–2021) for balanced HRH planning and training.
- Ensure Financial Protection in Health — Expand social protection schemes (SSK, MHVS) to reduce out-of-pocket health expenditure.
- Accelerate Digital Health Transformation — Operationalize the Bangladesh Digital Health Strategy 2023–2027 to strengthen data systems and telehealth services.
- Promote Equity and Inclusiveness — Prioritize vulnerable groups—women, children, elderly, and persons with disabilities—in policy design and implementation.

Table 3.1. Constitutional Provisions for Health

Article	Theme	Key Provision
15	Provision of Basic Necessities	The State must ensure food, shelter, education, and medical care for all citizens.
16	Rural Development & Agricultural Revolution	Calls for improvement of public health and reduction of urban–rural disparities.
18	Public Health and Morality	Directs the State to raise nutrition levels, improve public health, and control harmful substances.

National Policies and Strategies

Table 3.2. Bangladesh has introduced a comprehensive suite of policies to address emerging health challenges

Sl No.	Title	Year	Focus
1	National Health Policy	2011	Equitable access, primary care strengthening
2	National Nutrition Policy	2015	Food security and nutrition improvement
3	Healthcare Financing Strategy	2012–2032	Social protection and UHC financing
4	Bangladesh Health Workforce Strategy	2016–2021	Human resources for health
5	National Strategy for Adolescent Health	2017–2030	Adolescent health and reproductive services
6	National Policy on Occupational Health and Safety	2019	Workplace health and injury prevention
7	4th Health, Population and Nutrition Sector Program (HPNSP)	2017–2022 (extended to 2024)	Sector-wide implementation framework
8	Eighth Five-Year Plan (HNP Sector)	2020–2025	UHC and system strengthening
9	Bangladesh Digital Health Strategy	2023–2027	Digital transformation and interoperability

Table 3.3. Acts, Ordinances, and Regulatory Frameworks

Sl No.	Title	Year	Nature
1	Medical and Dental Council Act	2010	Professional regulation
2	Bangladesh Nursing and Midwifery Council Act	2016	Professional registration
3	Rules of Business	1996	Administrative governance
4	Births and Deaths Registration Act	2004	Vital registration
5	Environment Court Act	2000	Environmental health protection
6	Non-government Medical & Dental College Act	2022	Private sector education regulation
7	Medical Practice of Private Clinics and Laboratories (Regulation) Ordinance	1982	Private practice regulation
8	Communicable Disease (Prevention, Control and Elimination) Act	2018	Public health control
9	Vaccination Act	1880	Immunization law
10	Safe Blood Transfusion Act	2002	Blood safety
11	Drug (Control) Ordinance	1982	Pharmaceutical control
12	Mental Health Law	2018	Mental health rights and services

Table 3.3 contd.

Table continued...			
Sl No.	**Title**	**Year**	**Nature**
13	Smoking and Use of Tobacco Products (Control) Act	2005	Public health protection
14	Medical Waste Management and Processing Rules	2008	Environmental health management
15	Bangladesh Food Safety Act	2013	Food and consumer safety

Recommendations

- Expand and consolidate community-based primary healthcare.
- Strengthen medical education and accreditation systems.
- Introduce digital health data systems across MOHFW.
- Implement health protection schemes for the poor.
- Review and update laws for inclusiveness.
- Strengthen governance and accountability mechanisms.

Challenges and Way Forward

Despite notable progress, Bangladesh faces multiple challenges in implementation, coordination, and resource allocation. The following actions are critical to sustain progress toward UHC:

- Institutionalize evidence-based policymaking and regular legal review.
- Accelerate implementation of the Bangladesh Digital Health Strategy (2023–2027).
- Enhance multisectoral coordination for NCDs, nutrition, and environmental health.
- Strengthen data governance under a unified digital health architecture.
- Continue upholding the constitutional right to health through inclusive reforms.

References

- Constitution of the People's Republic of Bangladesh
- National Health Policy 2011, Ministry of Health and Family Welfare (MOHFW)
- National Nutrition Policy 2015, MOHFW
- Healthcare Financing Strategy 2012–2032, MOHFW
- Bangladesh Health Workforce Strategy 2016–2021, MOHFW
- National Strategy for Adolescent Health 2017–2030, MOHFW & UNICEF
- National Policy on Occupational Health and Safety 2019, Ministry of Labour and Employment
- Bangladesh Digital Health Strategy 2023–2027, Directorate General of Health Services (DGHS)
- Bangladesh Food Safety Act 2013, Bangladesh Food Safety Authority
- Communicable Disease (Prevention, Control and Elimination) Act 2018, Ministry of Law, Justice and Parliamentary Affairs
- Mental Health Act 2018, Ministry of Health and Family Welfare
- Medical Waste Management and Processing Rules 2008, Department of Environment
- Smoking and Tobacco Products (Control) Act 2005, Ministry of Health and Family Welfare
- Safe Blood Transfusion Act 2002, Legislative Division, MOHFW
- Rules of Business 1996, Cabinet Division
- MOHFW Acts, Rules and Government Gazettes (Official portals and Gazette publications)

Maternal Neonatal Child and Adolescent Health

Executive Summary

In 2024, Bangladesh accomplished remarkable advancements in maternal health outcomes, as evidenced by the decline of the Maternal Mortality Ratio (MMR) to 136 per 100,000 live births. This achievement underscores a sustained commitment to realizing the Sustainable Development Goal (SDG) target 3.1, which aims to reduce the MMR to below 70 by 2030. Nevertheless, considerable challenges persist in ensuring equitable access to high-quality maternal health services across the nation.

Antenatal care coverage presents a dichotomy, with an impressive 88% of pregnant women availing themselves of at least one antenatal care visit (ANC1). However, a mere 41% complete the recommended four or more visits (ANC4+), highlighting significant deficiencies in the continuity of care. Institutional delivery rates stand at 65%, yet there are troubling disparities between private facilities (45%) and public institutions (18%). The incidence of caesarean sections has surpassed 45%, with a staggering 84% conducted within private facilities, prompting concerns regarding the medical necessity and potential overutilization of such procedures.

The Demand Side Financing (DSF) program provided support to 86,077 mothers across 64 upazilas in 2024, elevating the cumulative number of beneficiaries to 1,934,772 since its inception. Cancer screening initiatives exhibited commendable efficacy, with 715,423 Visual Inspection with Acetic Acid (VIA) tests (2.6% positivity rate) and 725,276 Clinical Breast Examination (CBE) tests (1.5% positivity rate) conducted; however, there is a pressing need to enhance follow-up linkages.

Emergency response systems have been significantly enhanced through the implementation of the Maternal and Perinatal Death Surveillance and Response (MPDSR) program, which is now operational across all 64 districts, meticulously reviewing 525 maternal fatalities in 2024. The Obstetric Fistula Program achieved an impressive surgical success rate of 92%, having conducted 564 surgeries from a total of 735 admissions. The rollout of the HPV vaccination commenced in October 2023, targeting girls aged 10 to 14, marking a substantial advancement in the prevention of cervical cancer.

Despite notable accomplishments, enduring challenges encompass inadequate follow-up ANC coverage, disproportionately high caesarean rates in private healthcare facilities, protracted delays in fund disbursement for Demand-Side Financing (DSF) programs, and insufficient 24/7 Emergency Obstetric and Newborn Care (EmONC) services. Looking ahead, priorities will include fortifying public sector delivery services, regulating practices within the private sector, augmenting the deployment of midwives, and enhancing digital health systems to achieve improved maternal health outcomes.

Background and Strategic Objectives

Background

Maternal health remains a paramount priority in Bangladesh, strategically aligned with Sustainable Development Goal 3.1 which aims to diminish the maternal mortality ratio to fewer than 70 per 100,000 live births by the year 2030. The Directorate General of Health Services (DGHS) operating under the auspices of the Ministry of Health and Family Welfare, spearheads comprehensive maternal health initiatives through the Fourth Health, Population, and Nutrition Sector Program (4th HPNSP), in collaboration with various development partners Including United Nations agencies.

There are three principal topics that are elaborated upon herein. They are as follows:

- Service Delivery Infrastructure
- Emergency Care Systems
- Innovation and Quality Improvement

Strategic objectives

Expand equitable access to comprehensive antenatal, intrapartum, and postnatal care services across all geographic and socioeconomic strata.

- Achieve a target of 90% coverage for four or more antenatal care visits (ANC4+) and 80% institutional delivery rates through the fortification of service delivery systems.
- Ensure the uninterrupted availability (24/7) of Basic and Comprehensive Emergency Obstetric and Newborn Care (EmONC) services at designated facilities, staffed with proficient personnel and equipped with essential supplies

Maternal Mortality and Morbidity Reduction

- Reduce the maternal mortality ratio to 70 per 100,000 live births by 2030 through the implementation of evidence-based interventions and enhancement of quality improvement initiatives.
- Fortify the capacity for emergency obstetric care, encompassing the management of hemorrhage, eclampsia, sepsis, and obstructed labor
- Broaden the scope of maternal death surveillance and response systems to identify and rectify preventable causes of maternal mortality

Health System Strengthening and Innovation

- Deploy proficient midwives and adept birth attendants at the union and upazila levels to guarantee expert care during childbirth.
- Implement advanced digital health solutions for patient monitoring, referral systems, and data-informed decision making.
- Enhance supply chain management for essential pharmaceuticals, equipment, and commodities necessary for maternal health services.

Prevention and Early Detection

- Scale up cervical and breast cancer screening initiatives with enhanced follow-up and treatment linkages.
- Implement comprehensive family planning services seamlessly integrated with maternal health care to avert unintended pregnancies.
- Broaden HPV vaccination coverage for adolescent girls as a fundamental element of a holistic cervical cancer prevention strategy.

Current Status and Trends

Despite advancements in coverage, significant gaps remain in the follow-up of antenatal care (ANC), the readiness for emergency obstetric and neonatal care (EmONC), and the continuity of care. The private sector predominates in caesarean sections, raising concerns regarding medical justification for such procedures. Demand-side financing initiative demonstrates potential but necessitates timely financial support. Maternal and Perinatal Death Surveillance and Response (MPDSR) data indicate success in scaling interventions, yet challenges persist in referral responses and the quality of services provided. While Visual Inspection with Acetic Acid (VIA) and Community-Based Education (CBE) programs exhibit stability, they require enhanced follow-up and better integration with treatment services.

The training of midwives, the implementation of the Reproductive, Maternal, Newborn, and Child Health (RMNCAH) strategy, and the revision of labor room protocols have significantly bolstered readiness. Nevertheless, a robust human resources system, improved supervision, and logistical support are essential for achieving sustainable impact.

Table 4.1.1. Key Maternal Health Indicators 2024

Indicator	Achievement 2024	Target 2030	Data Source
Maternal Mortality Ratio	136 per 100,000 live births	70 per 100,000	SVRS 2023
ANC1 Coverage	88%	95%	DHIS2
ANC4+ Coverage	41%	80%	BDHS 2022
Institutional Delivery Rate	65%	80%	BDHS 2022
Skilled Birth Attendance	67%	90%	BDHS 2022
Caesarean Section Rate	>45%	15%	DHIS2
Postnatal Care Coverage	52%	75%	DHIS2

Maternal Health Service Coverage and Quality

Sustainable Development Goals (SDG)

Antenatal Care Performance: Bangladesh achieved 88% coverage for at least one antenatal care visit (ANC1), demonstrating strong initial engagement with the health system through community outreach and demand generation activities. However, completion of four or more ANC visits (ANC4+) remains at 41%, revealing significant challenges in continuity of care, follow-up counselling, and retention of pregnant women throughout pregnancy. Rural areas experience lower ANC4+ coverage due to transportation barriers, staff shortages, and limited availability of essential diagnostics, including haemoglobin testing, urine protein analysis, and blood pressure monitoring at primary care facilities.

Institutional Delivery and Birth Practices: Institutional delivery rates reached 65% nationally, with pronounced sector disparities showing 45% of deliveries occurring in private facilities compared to 18% in public facilities. This distribution reflects both accessibility preferences and quality perceptions, with urban populations predominantly utilizing private services while rural populations depend more heavily on public sector facilities. The gap indicates both inadequate public sector capacity and potential financial barriers despite free service policies.

Caesarean Section Trends and Concerns: Caesarean section rates exceeded 45% nationally, significantly above WHO recommendations of 10-15%, with alarming concentration in private facilities performing 84% of all cesarean deliveries compared to 14% in public facilities. This disparity suggests financial incentive-driven overuse in private sector and potential underuse in public facilities where medical necessity may not be met due to infrastructure limitations, anesthesia unavailability, or specialist shortages requiring urgent attention to optimize surgical delivery practices.

Maternal Mortality and Emergency Care Systems

Maternal Mortality Reduction Progress: The maternal mortality ratio declined to 136 per 100,000 live births (SVRS 2023), representing substantial progress toward the SDG target of 70 by 2030. This reduction reflects improved birth preparedness, expanded access to skilled care, and enhanced emergency obstetric services. However, deaths from haemorrhage, eclampsia, and sepsis continue to dominate mortality patterns, emphasizing needs for strengthened emergency response systems, better referral mechanisms, and community preparedness for obstetric emergencies.

Emergency Obstetric and Newborn Care Capacity: Basic and Comprehensive EmONC services have been established across most upazilas and district hospitals, though functionality remains inconsistent due to staffing

constraints, particularly anaesthetists and gynecologists, irregular availability of essential supplies including magnesium sulfate and blood products, and infrastructure limitations affecting 24/7 service provision. Delayed referrals, transportation challenges, and facility overcrowding further compromise EmONC effectiveness and maternal outcomes.

Surveillance and Response Systems: The MPDSR program operates in all 64 districts, reviewing 525 maternal deaths in 2024 through verbal autopsies and facility-based investigations. While scaling has been successful, effectiveness remains limited by referral delays, incomplete action plan implementation following death reviews, and insufficient linkage between surveillance findings and system-level improvements for preventing future deaths.

Specialized Programs and Innovation

Demand Side Financing Program Performance
The DSF maternal voucher scheme supported 86,077 mothers across 64 upazilas in 2024, providing transportation support, medicines, and financial incentives for ANC, delivery, and postnatal care services. Cumulative beneficiaries reached 1,934,772 since program inception, demonstrating a significant impact on improving institutional delivery rates among low-income populations. However, implementation faces challenges from delayed fund disbursement, administrative bottlenecks, and monitoring gaps that threaten program sustainability and expansion to the proposed 200 upazilas.

Table 4.1.2. Impact of Demand Side Financing program

Indicator	Cumulative (2006-2024)	2024 Performance
Total beneficiaries	1,934,772	86,077
Cash incentives paid	1,889,690	45,082
Pending payments	45,082	40,995
Operational upazilas	64	64
Proposed expansion	200 upazilas	Under approval

Achievements of the Cancer Screening Program: Cervical and breast cancer screening programs conducted 715,423 VIA tests with a 2.6% positivity rate (18,700 positive cases) and 725,276 CBE tests with a 1.5% positivity rate (11,180 positive cases) in 2024. While screening coverage continues expanding, referral pathways for biopsy confirmation and treatment remain inadequate, particularly in remote areas. Digital tracking through DHIS2 and integration with 60 colposcopy centres in 46 districts provides foundation for improved follow-up care coordination.

Table 4.1.3. Cancer Screening program performance 2024

Type of screening	Tests conducted	Positive cases	Positivity rate	Follow-up rate
VIA (Cervical)	715,423	18,700	2.6%	Under review
CBE (Breast)	725,276	11,180	1.5%	Under review
Total	1,440,699	29,880	2.1%	Needs improvement

Obstetric Fistula Care and HPV Prevention: The Obstetric Fistula Program achieved a 92% surgical success rate with 564 repairs performed from 735 admissions across 23 government and private facilities. Rehabilitation support reached over 300 survivors through livestock, sewing machines, and

psychosocial assistance. HPV vaccination launched in October 2023, targeting girls aged 10-14, represents a significant advancement in cervical cancer prevention, though coverage monitoring and dropout prevention require strengthened systems.

Table 4.1.4. Obstetric Fistula program results 2024

Service component	Achievement	Success rate
Admissions	735 patients	-
Surgeries performed	564 operations	92% success
Obstetric Fistula cases	54% of total	-
Iatrogenic Fistula cases	42% of total	-
Vesicovaginal Fistula	81% of cases	-
Rehabilitation support	300+ survivors	Ongoing

Program Implementation Highlights

Service Delivery Strengthening and Quality Improvement

- **Reaching Every Mother and Newborn (REMN) Strategy Implementation:** Deployed a comprehensive microplanning approach across districts, emphasising facility readiness, resource management, supportive supervision, community engagement, and data-driven decision making for 80% maternal and newborn health service coverage
- **Labour Room Management Protocol Updates:** Rolled out 3rd edition of the protocols nationally, incorporating PPH bundle care, pre-eclampsia and eclampsia management, midwifery-led care guidelines, and evidence-based intrapartum practices developed through DGHS working groups with UNFPA and OGSB support
- **Midwife Deployment and Capacity Building:** Stationed trained midwives at Upazila Health Complexes and union-level facilities while conducting Community-based Skilled Birth Attendants (875,276) training across 465 upazilas for 12,480 CSBA to ensure 24/7 skilled care availability
- **Emergency Obstetric Care Enhancement:** Strengthened 24/7 EmONC services at district hospitals and selected UHCs with blood transfusion facilities, PPH and eclampsia bundle implementation, and post-abortion care service integration

Specialized Program Expansion and Innovation

- Demand Side Financing (DSF) Program Operations: Supported 86,077 mothers across 64 upazilas with comprehensive voucher services covering ANC, delivery, PNC, transportation, and cash incentives through mobile banking, while developing an expansion proposal for an additional 136 upazilas
- Maternal and Perinatal Death Surveillance and Response (MPDSR): Conducted 525 maternal death reviews across all 64 districts through verbal and social autopsies, organized five district-level response planning workshops, and held national video conferences for performance monitoring and gap analysis
- Cervical and Breast Cancer Screening Services: Implemented population-based screening with electronic data tracking in 200 selected upazilas, conducted 715,423 VIA and 725,276 CBE tests, and operated 60 colposcopy centres with thermal ablation and LEEP capabilities
- Obstetric Fistula Comprehensive Care: Performed 564 fistula repair surgeries with a 92% success rate across 23 facilities, provided rehabilitation support to 300+ survivors, organized awareness campaigns in

Sunamganj, Manikganj, and Sirajganj districts, and hosted the 9th International Fistula Surgeon's Conference

Digital Health Integration and System Strengthening

- DHIS2 Health Information System Enhancement: Integrated maternal health indicators including ANC tracking, institutional delivery monitoring, MPDSR reporting, and cancer screening follow-up with auto-generated health bulletins and dashboard analytics
- Electronic Patient Tracking and Referral Systems: Deployed e-tracking systems for early pregnancy registration, high-risk case identification, and referral coordination while developing MIS tools for emergency maternal care transport management
- Community Engagement and Behavior Change: Conducted nationwide Safe Motherhood Day celebrations, television commercials and mass campaigns, social media initiatives, and community-based awareness programs promoting facility-based deliveries and skilled birth attendance
- HPV Vaccination Program Launch: Initiated national HPV vaccination program in October 2023 targeting girls aged 10-14 through school-based and community outreach approaches with coordination between EPI and DGHS for coverage monitoring

Capacity Building and Quality Assurance

- Health Worker Training and Mentoring: Conducted comprehensive training programs for medical officers, midwives, CSBAs, and CHCPs on updated maternal health protocols, emergency management, and quality of care standards with supportive supervision and clinical mentoring
- Facility Readiness and Infrastructure Development: Upgraded labour rooms, ensured standard equipment availability, strengthened blood transfusion capabilities at upazila and district levels, and enhanced referral system functionality with improved ambulance services
- Partnership and Coordination Mechanisms: Strengthened collaboration with UN agencies (UNFPA, UNICEF, WHO), professional organizations (OGSB), and NGO partners for technical assistance, capacity building, and service delivery support
- Monitoring and Evaluation Systems: Established comprehensive performance monitoring through DHIS2 reporting, MPDSR death review processes, facility-based supervision, and outcome evaluation studies for continuous program improvement

Recommendations

Policy and Governance

Immediate Priority Actions:

1. Integrate Universal Health Coverage
2. Strengthen Private Sector Regulation and Standards
3. Expand Demand-Side Financing Mechanisms
4. Ensure Health System Financing Sustainability

Medium-term Strategic Actions:

1. Comprehensive Maternal Health Policy Framework
2. Human Resource Development Strategy
3. Digital Health Governance
4. Adolescent and Reproductive Health Integration

Operational Improvements

a. Service Delivery Enhancement

- Ensure 24/7 EmONC services in all district hospitals and major UHCs through specialist deployment, essential equipment, and reliable supply chains.
- Raise ANC4+ coverage from 41% to 70% by 2027 through community outreach, digital scheduling, transport support, and on-site diagnostics.

- Strengthen referrals with standard protocols, better ambulance and communication systems, and patient tracking for obstetric emergencies.
- Improve cancer screening follow-up through treatment linkages, "see-and-treat" methods, and stronger tertiary care capacity.

b. Quality Enhancement and Clinical Standards

- Optimize cesarean section practices using the Robson Ten Group Classification system to support clinical audits and promote assisted vaginal delivery where appropriate.
- Strengthen labor room management through standardized protocols, effective partograph use, respectful maternity care, and strict infection control.
- Improve management of postpartum hemorrhage and eclampsia through bundle care, hands-on provider training, and reliable access to oxytocin and magnesium sulfate.
- Expand postnatal care coverage via home visits, facility follow-up, and integrated newborn care for comprehensive maternal and child health outcomes.

c. System Integration and Coordination

- Enhance MPDSR effectiveness through timely death reviews, actionable response plans, close implementation monitoring, and strong feedback systems for continuous quality improvement.
- Integrate family planning with maternal health services to reduce unintended pregnancies, promote optimal birth spacing, and provide comprehensive reproductive counseling.
- Strengthen community health worker capacity through focused training, supervision, and logistical support for pregnancy tracking, ANC follow-up, birth preparedness, and complication referrals.
- Promote public–private partnerships for maternal health service delivery while maintaining quality standards and ensuring affordability for vulnerable populations.

d. Resource and Capacity Requirements

Human Resource Development:

- Deploy trained midwives to all union-level facilities and expand midwifery education programs to meet the growing national demand for skilled birth attendants.
- Provide refresher training for medical officers, nurses, and paramedics on updated maternal health protocols, emergency management, and quality care, supported by regular competency assessments.
- Establish clinical mentorship programs linking tertiary hospitals with district and upazila facilities to promote continuous professional development and quality assurance.
- Strengthen supervisory capacity at district and upazila levels through training focused on supportive supervision, performance monitoring, and problem-solving approaches.

Infrastructure and Technology Investment:

- Modernize labor rooms, operating theaters, blood storage facilities, and neonatal care units at district and upazila hospitals with advanced equipment and reliable power supply.
- Implement digital health systems featuring electronic medical records, patient tracking, referral coordination, and telemedicine for specialist consultations.
- Establish efficient transportation networks including ambulances, boat ambulances for riverine areas, and helicopter services for critical or hard-to-reach cases.
- Strengthen laboratory and diagnostic capacity by ensuring 24/7 availability of essential tests, blood banking, and point-of-care diagnostics at peripheral facilities.

Financial Sustainability and Innovation:

- Develop sustainable financing mechanisms for maternal health through diversified sources including government budgets, health insurance, and innovative financing tools.
- Introduce performance-based financing models linking facility payments to key maternal health outcomes such as reduced MMR, higher ANC completion, and increased institutional deliveries.
- Establish emergency funding systems to manage maternal health crises and sudden service demand surges while maintaining routine operations.
- Promote public–private partnerships for maternal health technology, service delivery, and infrastructure development, ensuring affordability and quality standards.

Research and Development Support:

- Conduct operational research to identify effective interventions for reducing maternal mortality and improving service quality.
- Build research networks connecting academia, government, and partners to strengthen evidence generation.
- Promote innovation through platforms testing mobile health, community-based care, and digital solutions.
- Document and share best practices and lessons learned to support scaling of successful interventions.

Technical Notes

Data Sources

- District Health Information System 2 (DHIS2)
- Bangladesh Demographic and Health Survey (BDHS) 2022
- Sample Vital Registration System (SVRS) 2023
- MPDSR National Database
- VIA/CBE Screening Program Database
- DSF Program Monitoring System

Data Collection Methods

- Routine Health Facility Reporting
- Population-Based Surveys
- Maternal Death Surveillance
- Program-Specific Monitoring
- Quality Assessment Studies

Data Update Frequencies

- Real-time Reporting
- Monthly Updates
- Quarterly Assessments
- Annual Evaluations
- Event-based Reporting

Limitations and Methodological Considerations

- Coverage Variations
- Private Sector Data Gaps
- Survey Timing Limitations
- Recall Bias
- Denominator Challenges

References

- National Strategic and Policy Documents
    1. Fourth Health, Population and Nutrition Sector Programme (4th HPNSP) 2017-2022
    2. Bangladesh Maternal Health Strategy and Implementation Plan 2024-2030
    3. National Guidelines for Maternal and Perinatal Death Surveillance and Response (MPDSR) 2024
    4. Labor Room Management Protocol 3rd Edition 2024
    5. Reaching Every Mother and Newborn (REMN) Implementation Guidelines
- Survey and Statistical Reports
- Program Implementation and Evaluation Documents
- Technical Guidelines and Protocols
- Research Publications and Studies

Expanded Program on Immunization

Executive Summary

Bangladesh's Expanded Program on Immunization (EPI), inaugurated in 1979, has attained extraordinary success, boasting a crude coverage rate of 95.2% and a full valid coverage rate of 81.6% among children under one year of age, while ensuring that less than 1.2% of children remain unvaccinated nationally. This initiative safeguards against 11 vaccine-preventable diseases through comprehensive immunization services that extend to all children under 24 months, girls aged 10, and women between the ages of 15 and 49.

Major milestones encompass the attainment of polio-free status in 2014, the elimination of maternal and neonatal tetanus in 2008, the control of rubella and congenital rubella syndrome in 2018, and the achievement of hepatitis-B control targets in 2019. The landmarking HPV vaccination campaign, launched in 2023, accomplished an impressive 89% coverage among 8.1 million targeted girls, representing a substantial advancement toward the eradication of cervical cancer by 2030.

Digital innovations encompass the VaxEPI national registry, the eVLMIS supply chain system, GIS-based microplanning, and online supervision tools, all of which significantly enhance the efficiency of service delivery. The program adeptly managed the COVID-19 vaccination initiative from 2021 to 2022 and is now diligently preparing for the Typhoid Conjugate Vaccine campaign scheduled for 2025, which aims to target 49 million children aged 9 months to under 15 years.

Moving forward, our priorities encompass the attainment of measles-rubella elimination by 2026, the sustenance of disease-free certifications, the fortification of vaccine supply systems, and the augmentation of digital health innovations to enhance coverage and equity across all demographics.

Background and Strategic Objectives

Background

The Expanded Program on Immunization was formally inaugurated in Bangladesh on April 7, 1979, with the initial objective of combating six vaccine-preventable diseases: tuberculosis (BCG), diphtheria-pertussis-tetanus (DPT), poliomyelitis (OPV), measles, and tetanus (TT). The initiatives commenced with limited reach within prominent districts and municipalities before broadening their scope through the Universal Child Immunization initiative, which began in 1985.

EPI has systematically expanded vaccine coverage with hepatitis-B introduction (2003), auto-disable syringes implementation (2004), Hib vaccine integration through pentavalent vaccine (2009), measles-rubella vaccine and second measles dose (2012), pneumococcal conjugate and inactivated polio vaccines (2015), tetanus-diphtheria vaccine transition (2019), and HPV vaccine launch (2023).

Currently, EPI protects against 11 diseases: tuberculosis, poliomyelitis, diphtheria, pertussis, tetanus, hepatitis-B, Haemophilus influenzae type B, pneumococcal pneumonia, measles, rubella, and cervical cancer. The program serves all children under 24 months, 10-year-old girls (HPV), and women aged 15-49 (Td vaccination).

Strategic Objectives

Coverage and Quality Target

- Achieve and sustain a minimum of 95% full vaccination coverage among children under

the age of two years on a national scale, and 90% coverage at each district level

- Attain and uphold at least 80% Td5 coverage among women of childbearing age nationally, with a target of 75% at the district level.
- Fortify vaccine supply systems, enhance management systems, and integrate novel vaccines for comprehensive disease prevention.

Disease Elimination and Control Objectives

- Sustain polio-free certification and validate the elimination of maternal-neonatal tetanus.
- Attain and uphold the elimination of measles, rubella, and congenital rubella syndrome by 2026
- Ensure the ongoing management of hepatitis-B through routine immunization and realize the elimination of cervical cancer by 2030
- Ensure surveillance and response systems for vaccine-preventable disease to facilitate early detection and swift containment.

Current Status and Trends

Immunization Coverage and Program Performance

Bangladesh exhibits remarkable immunization efficacy, as evidenced by the 2023 EPI coverage evaluation survey, which reports a commendable 95.2% crude coverage and an impressive 81.6% full valid coverage among children under one year of age. BCG coverage attained at outstanding 98.8% with a mere 1.2% of children remaining unvaccinated, underscoring the government's unwavering commitment to reaching every child, including those in underserved urban slums and hard-to-reach populations.

Table 4.2.1. Comprehensive childhood vaccination schedule and coverage

Vaccine	Doses	Administration age	Dose Interval	Route	Coverage status
BCG	1	After birth	-	Intradermal	98.8%
Pentavalent	3	W6, W10, W14	4 weeks	Intramuscular	High coverage
PCV	3	W6, W10, W14	4 weeks	Intramuscular	Strong performance
bOPV	3	W6, W10, W14	4 weeks	Oral	Maintaining coverage
IPV	2	W6, W14	8 weeks	Intradermal	Adequate coverage
Measles-Rubella	2	9 & 15 months	-	Subcutaneous	Good coverage

Achievements and Objectives in Disease Elimination

Achieved Elimination Milestones Bangladesh successfully achieved multiple disease elimination and control targets, including maternal and neonatal tetanus elimination (2008), polio-free status (2014), rubella and congenital rubella syndrome control (2018), and hepatitis-B control target (2019). These achievements earned international recognition, including Gavi awards (2009, 2012) and the Vaccine Hero award (2019).

HPV Campaign Success and Future Targets The nationwide HPV vaccination campaign represents a landmark achievement, targeting cervical cancer elimination by 2030. Phase 1 (Dhaka Division, 2023) reached 1,508,183 girls (77.54% coverage after catch-up), while Phase 2 (remaining divisions, 2024) vaccinated over 5.6 million girls, achieving 92.6% coverage, demonstrating successful large-scale campaign implementation capacity.

Surveillance and Safety Mechanisms

Vaccine-Preventable Disease Surveillance Comprehensive surveillance systems monitor acute flaccid paralysis, polio, acute encephalitis syndrome, measles, neonatal tetanus, congenital rubella syndrome, tuberculosis, diphtheria, pertussis, and post-neonatal tetanus. Online reporting through DHIS2 (initiated 2021) enhances real-time monitoring and response capabilities with both facility-based and community-based surveillance components.

Adverse Events Following Immunization (AEFI) The program maintains robust safety monitoring with 1,667 AEFI cases reported in 2024, including 43 serious events. All serious AEFI cases underwent investigation (100%) with completed causality assessments (100%), demonstrating comprehensive safety surveillance and response systems ensuring public confidence in immunization programs.

Program Implementation Highlights

Comprehensive Vaccination Program Delivery

Bangladesh maintained a robust vaccination program in 2024, achieving 95.2% crude and 81.6% full valid coverage among children under one year, with BCG at 98.8%. The two-phase HPV campaign reached 89% of 8.1 million girls aged 10–14, advancing progress toward cervical cancer elimination. Routine Td1–Td5 vaccination for women 15–49 sustained maternal and neonatal tetanus elimination, while the COVID-19 program (2021–2022) showcased strong national capacity for rapid emergency vaccine delivery.

Digital Health Innovation and System Strengthening

Bangladesh advanced digital transformation in immunization through multiple innovations in 2024. The VaxEPI National Registry enabled real-time immunization tracking and data-driven decision-making, while the eVLMIS system modernized vaccine logistics using blockchain, AI, and IoT for enhanced supply chain visibility and cold chain monitoring. GIS-based microplanning tools improved equitable vaccine distribution and identification of zero-dose children in hard-to-reach areas. Additionally, digital monitoring systems, including the EPI e-tracker, online supervision platforms, and app-based vaccination centre locators, strengthened frontline service delivery and accessibility nationwide.

Quality Assurance and Safety Monitoring

Bangladesh strengthened vaccine safety and quality systems in 2024 through robust monitoring, capacity building, and surveillance enhancement. A comprehensive AEFI monitoring system ensured 100% investigation and causality assessment of serious events, maintaining vaccine safety and public trust. Data quality improved through a triangulation toolkit supporting evidence-based decision-making and routine monitoring. National training programs for Typhoid Conjugate Vaccine introduction and IPC/ community engagement built workforce capacity, while vaccine-preventable disease surveillance was expanded via online DHIS2 reporting and integrated facility- and community-based systems.

Table 4.2.2. AEFI reporting with investigation and causality assessment, Bangladesh, 2024

Year	Total AEFI reported	Total serious AEFI reported	Investigated serious AEFI (%)	Causality assessment completed (%)
2024	1667	43	100%	100.00%

Table 4.2.3. Chronology of Vaccine Introduction in Bangladesh	
Type of vaccine	**Year**
BCG, DPT, OPV, Measles, TT	1979
Hepatiitis-B	2003
Pentavalent (DPT, Hib, Hepatitis-B)	2009
Measles Rubella	2012
PCV (Pneumococcal Conjugate Vaccine)	2015
IPV (Inactivated Polio Vaccine)	2015
Td (Tetanus, Diphtheria)	2019
HPV Vaccine	2023

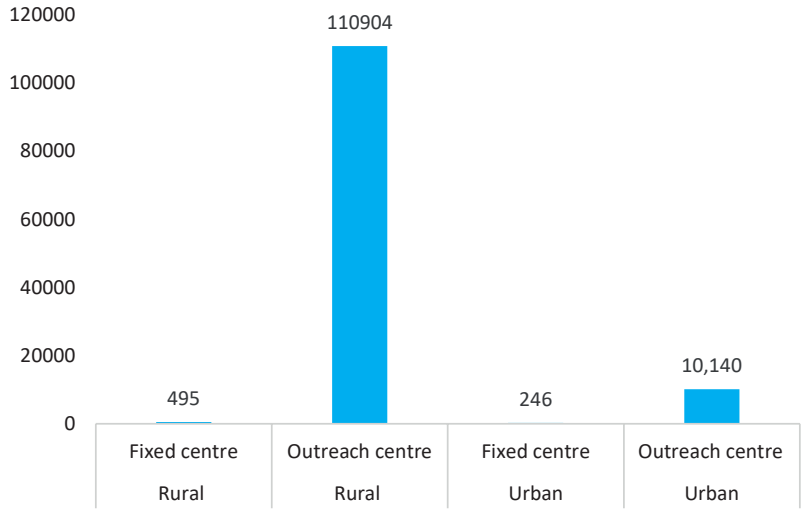


Figure 4.2.1. Comprehensive framework of EPI services in Bangladesh

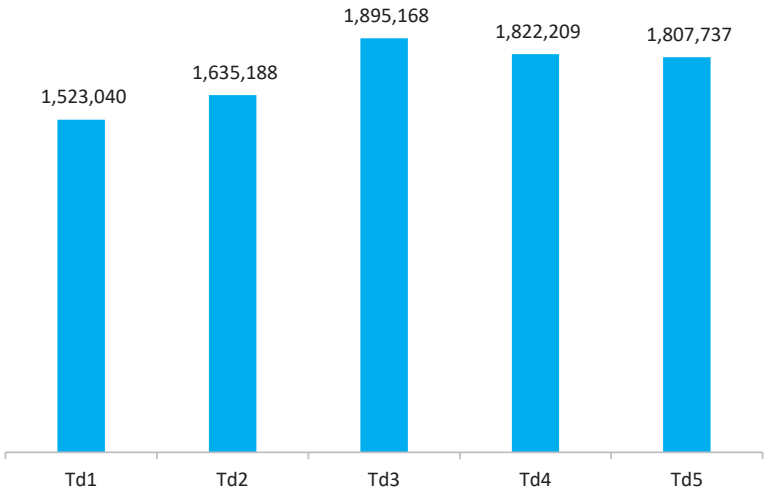


Figure 4.2.2. Total number of Td1-Td5 immunizations administered among the women aged 15 to 49 years in Bangladesh, 2024

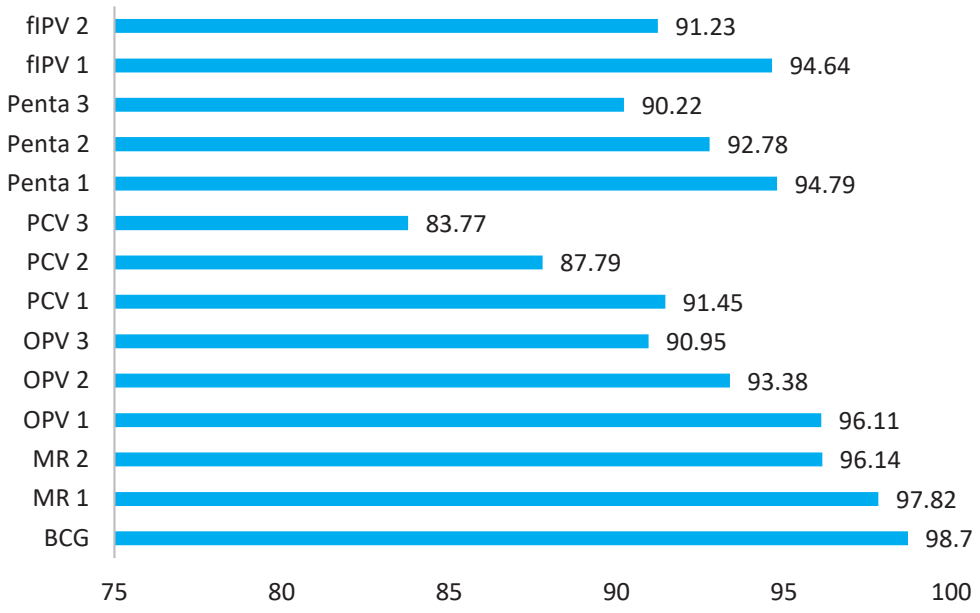


Figure 4.2.3. Crude vaccination coverage (%) among infants (0 to 11 months) in Bangladesh, 2024

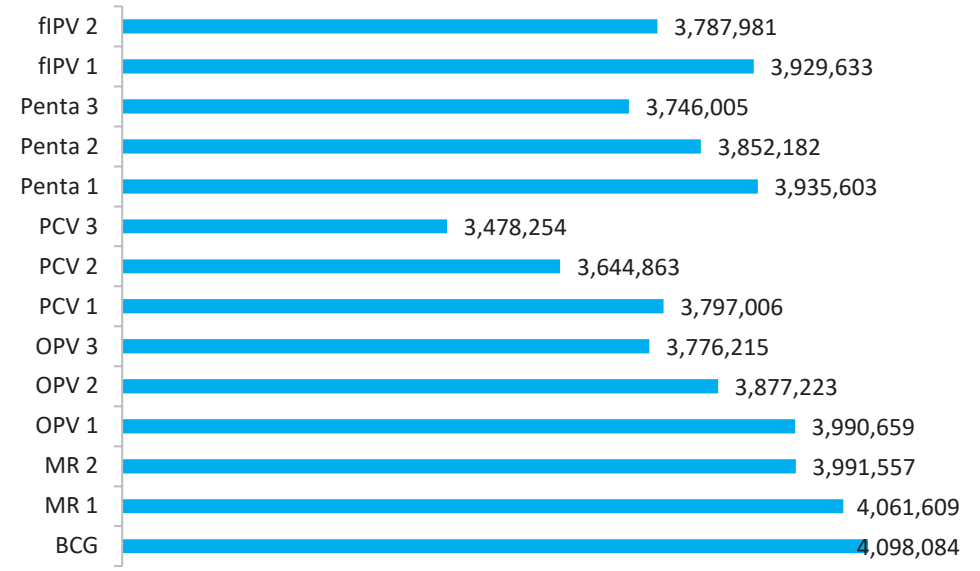


Figure 4.2.4. Aggregate number of doses (in millions) of all childhood vaccinations administered to infants aged 0 to 11 months, predicted on the projected number of births in Bangladesh for the year 2024

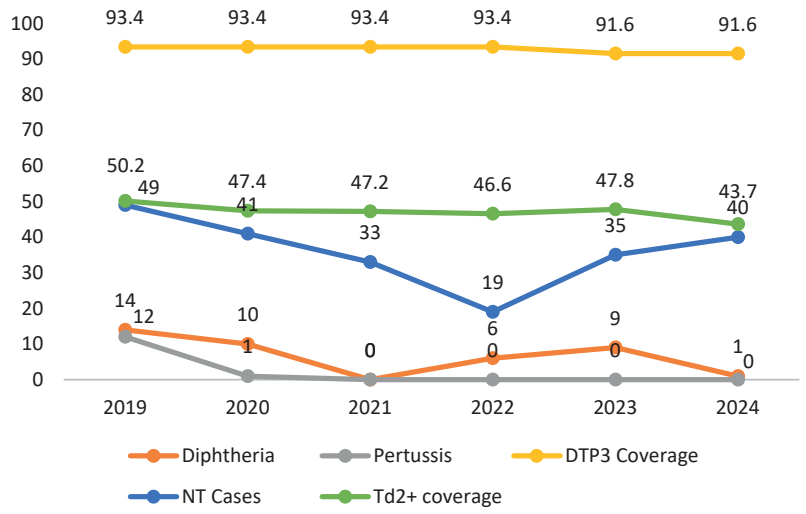


Figure 4.2.5. Immunization coverage for DPT3, Td2+ and occurrences of NT cases alongside incidents of diphtheria and pertussis from 2019 to 2024.

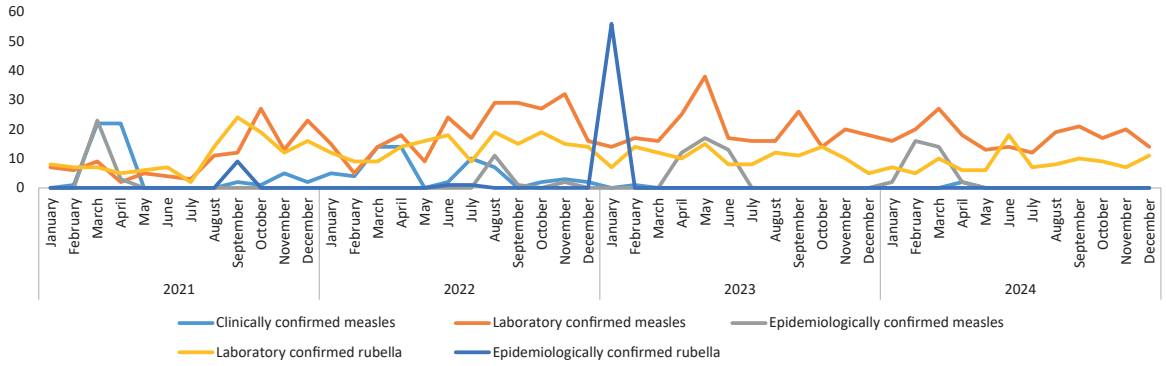
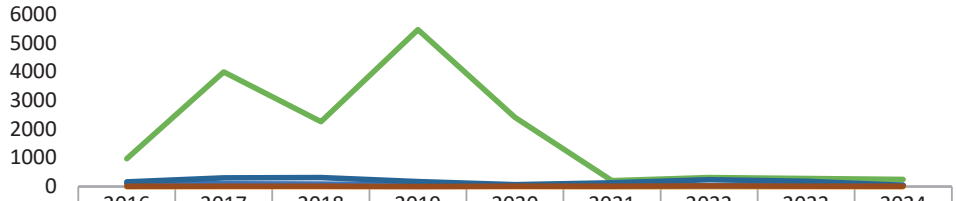


Figure 4.2.6. Documented instances of vaccine-preventable diseases, 2021-2024



	2016	2017	2018	2019	2020	2021	2022	2023	2024
Polio	0	0	0	0	0	0	0	0	0
Diphtheria	2	5	36	14	10	0	6	9	1
Pertusis	1	0	3	12	1	0	0	0	0
NT	110	96	85	49	42	33	21	35	40
Measles	972	4001	2263	5479	2412	203	311	280	247
Rubella	165	299	308	170	66	129	236	182	40
CRS (Lab Confirmed)	8	11	6	3	6	10	16	9	8

Polio Diphtheria Pertusis NT Measles Rubella CRS (Lab confirmed)

Figure 4.2.7. Trends in reported Vaccine-Preventable diseases, Bangladesh, 2016–2024

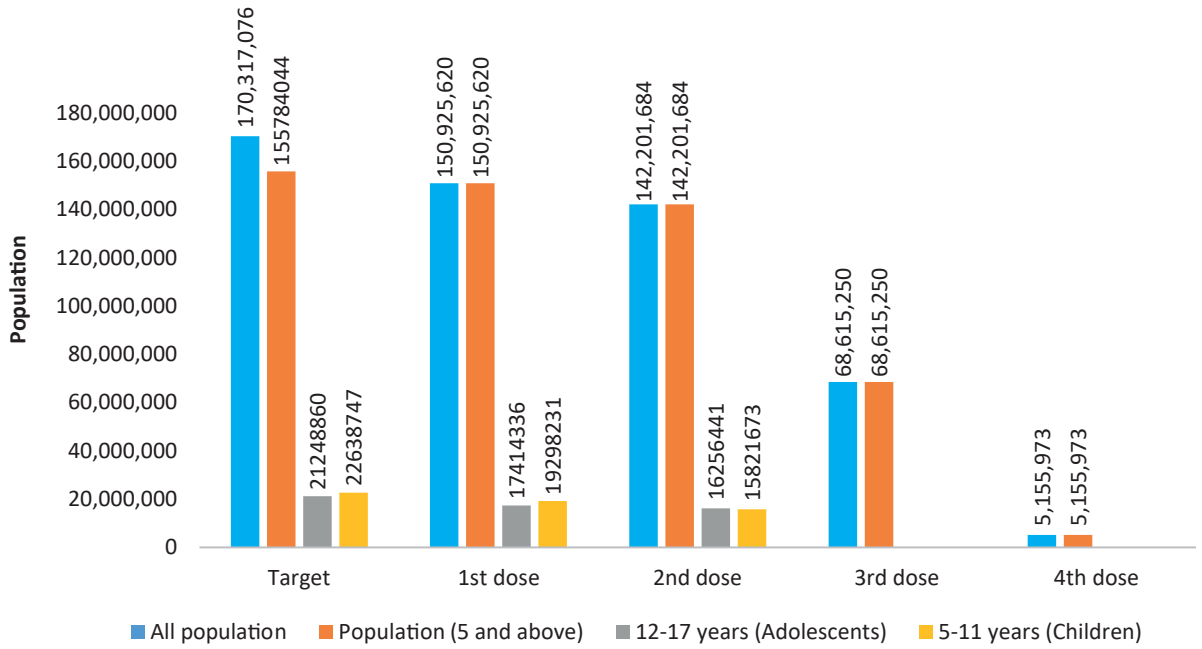


Figure 4.2.8. COVID-19 vaccination coverage by dose, as of September 12, 2024

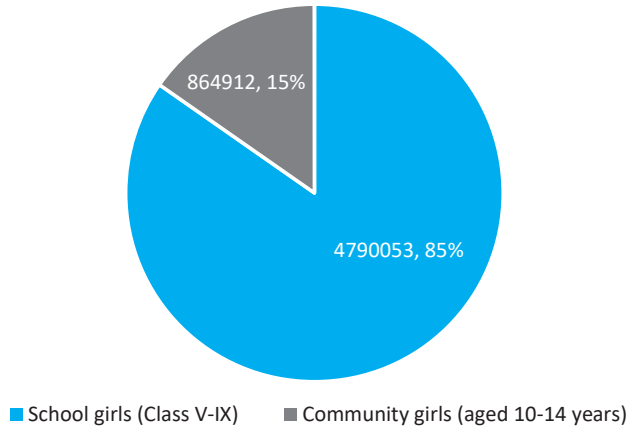


Figure 4.2.9. Administration of HPV vaccinations within the educational institutions and community settings in 2024

Recommendations

Policy Recommendations

- Disease Elimination Strategy: Develop comprehensive strategies for achieving measles-rubella elimination by 2026 and cervical cancer elimination by 2030 through sustained high coverage, targeted interventions, and strong surveillance systems
- New Vaccine Introduction: Systematically introduce Typhoid Conjugate Vaccine (2025) targeting 49 million children while ensuring adequate funding, cold chain capacity, and workforce preparation
- Digital Health Integration: Expand digital innovations, including VaxEPI registry, eVLMIS supply chain system, and GIS-based microplanning across all administrative levels for improved efficiency and equity

Operational Improvements

- Coverage Equity Enhancement: Strengthen immunization services in underserved urban slums, hard-to-reach populations, and geographic areas with lower coverage through targeted interventions and community engagement
- Supply Chain Optimization: Enhance vaccine logistics through eVLMIS implementation, cold chain strengthening, and inventory management improvements, ensuring uninterrupted vaccine availability
- Surveillance System Enhancement: Strengthen vaccine-preventable disease surveillance through improved laboratory capacity, real-time reporting, and rapid response mechanisms for outbreak detection and containment

Resource and Capacity Requirements

- Sustainable Financing: Secure long-term government commitment and diversified funding mechanisms for routine immunization, new vaccine introduction, and campaign implementation
- Workforce Development: Strengthen human resource capacity through systematic training, supportive supervision, and performance management for healthcare workers at all levels
- Infrastructure Investment: Upgrade cold chain systems, establish adequate vaccine storage facilities, and enhance healthcare infrastructure supporting quality immunization service delivery

Technical Notes

Data Sources

- District Health Information System (DHIS2) routine reporting
- EPI Coverage Evaluation Survey 2023 (published 2025)
- WHO immunization and surveillance databases
- National program monitoring and evaluation reports

Collection Methods

- Routine facility-based data entry
- Monthly and quarterly performance evaluations
- Frequency of Updates:
- Monthly (routine)
- Annual (summarized reporting)

Quality Assurance

- Onsite supervision
- Periodic data audits
- Dashboard validation assessments

References

- Directorate General of Health Services (DGHS), Expanded Programme on Immunization (EPI) includes items such as:
    - □ AEFI Surveillance & Response Operational Guideline (2021)
    - □ EPI Management and Microplan Guide
    - □ EPI Vaccination Schedule (Bangladesh)
- World Health Organization (WHO) – Fact Sheet: “Bangladesh – Expanded Programme on Immunization (EPI) Factsheet 2024”
- “EPI Coverage Evaluation Survey 2023” (Bangladesh)
- National Strategy for Cervical Cancer Prevention and Control Bangladesh 2017-2022”
- “Bangladesh Zero-Dose Landscape” (July 2023)

Communicable Disease Control

Key Highlights of Executive Summary

In 2024, Bangladesh fortified its status as a regional vanguard in communicable disease control through resolute action and sustained program implementation. The National Tuberculosis Control Program yielded remarkable outcomes, achieving a 96% treatment success rate while notifying 313,004 cases and enrolling 177,071 contacts in preventive treatment. The program augmented molecular diagnostic coverage from 26% to 54% and conducted 410 comprehensive training sessions, reaching over 10,000 healthcare professionals.

Kala-azar surveillance upheld elimination status with merely 87 cases reported, while executing intensified cluster investigations across 9,474 households and screening 38,717 individuals. All 100 previously endemic upazilas maintained elimination targets below 1 case per 10,000 population, exemplifying effective post-elimination surveillance.

The HIV/AIDS program identified and linked 1,438 new cases to treatment services while maintaining prevalence below 0.01% within the general population. The integration of the PLHIV database into DHIS2, initiated in 2021, has since been fully implemented and continues to be used effectively for real-time patient tracking and treatment monitoring.

Malaria control accelerated progress in endemic districts: Bandarban reduced the Annual Parasite Index (API) by 20% to 15.62 per 1,000, Rangamati achieved a 23% decline to 5.66 per 1,000, and Khagrachhari decreased by 18% to 0.77 per 1,000. The program initiated innovative malaria vaccination operational research in 100 villages in Bandarban district.

Mass intervention programs expanded coverage nationwide: 39,043,177 school-aged children received deworming treatment, achieving a remarkable 93.88% coverage, Indoor Residual Spraying safeguarded 2.3 million households across 81 upazilas, and 495 World Rabies Day events galvanized communities in all 64 districts. The Leprosy program detected and treated 3,519 new cases while sustaining prevalence at 0.18 per 1,000 population.

Surveillance and preparedness systems were enhanced through the establishment of 11 AMR sentinel sites, the pre-positioning of cholera diagnostic kits in high-risk areas, and the fortification of IHR capacity at 32 designated points of entry. These coordinated endeavours reflect Bangladesh's commitment to sustaining disease elimination achievements while cultivating resilience against emerging health threats.

Notwithstanding these accomplishments, Bangladesh continues to confront challenges in communicable disease control. The surge in dengue cases and fatalities since 2022, coupled with a rise in cholera incidence, underscores the persistent menace of vector-borne and waterborne diseases. Re-emerging infections such as diphtheria, Nipah virus, and anthrax pose seasonal risks, necessitating vigilant surveillance and prompt response. Antimicrobial resistance (AMR) has also emerged as a critical concern, with surveillance data revealing alarming resistance patterns that jeopardize progress in infectious disease management. Climate change, urbanization, and migration further complicate disease control efforts. Escalating temperatures and erratic weather patterns engender favorable conditions for mosquito-borne diseases like dengue, while the influx of displaced populations in Cox's Bazar strains local health Services.

Moving forward, Bangladesh must prioritize augmented domestic financing for program sustainability, integrate communicable disease control into the universal health coverage framework, and fortify multisectoral coordination through One Health approaches. Actions are imperative to expand HIV testing coverage among TB patients, enhance molecular diagnostic capacity, and formulate comprehensive strategies for transitioning donor-funded positions to government budgets. Success in achieving the 2030 elimination targets for rabies, malaria, and sustained kala-azar elimination hinges on unwavering political commitment, adequate resource allocation, and continued innovation in service delivery methodologies.

Background and Strategic Objectives

Background

Bangladesh has achieved remarkable advancements in the management of communicable diseases (CDs), accomplishing several pivotal milestones ahead of schedule. The nation has successfully eradicated smallpox and polio, while measles is currently in the elimination phase. Diseases such as diphtheria, tetanus, and malaria have experienced substantial declines owing to extensive vaccination efforts, case isolation, and targeted interventions. Furthermore, Bangladesh has eradicated lymphatic filariasis (LF) as a public health concern, maintained the elimination of kala-azar since 2017, and diminished the prevalence of soil-transmitted helminthiasis (STH) to a mere 7.95% among schoolchildren. As a signatory to International Health Regulations (IHR) 2005, Bangladesh employs a multisectoral One Health approach. Despite the burgeoning challenge posed by non-communicable diseases, the control of communicable diseases remains a paramount priority under the Sustainable Development Goal (SDG) target 3.3.

National Tuberculosis Control Program (NTB): Despite commendable advancements, Bangladesh persists in its classification as a high burden nation for tuberculosis (TB), grappling with a notable prevalence of multidrug-resistant TB (MDR-TB) and co-infections involving TB and HIV, as reported by the WHO Global TB report. The nation's TB control initiatives have evolved from specialized hospitals to achieve comprehensive national coverage by 2007, marked by the introduction of the Directly Observed Treatment, Short Course (DOTS) strategy in 1993. These initiatives realized a remarkable 95% treatment success rate by 2003 and have consistently sustained rates exceeding 90% since 2005. The program successfully attained the WHO benchmark of 70% case detection for new Pulmonary Bacteriologically Confirmed TB cases by 2006 and has subsequently embraced digital transformation through the implementation of the eTB Manager across all healthcare facilities.

Initially, tuberculosis control efforts in Bangladesh were concentrated around specialized TB clinics and hospitals, with significant expansion occurring during the Second Health and Population Plan (1980–1986), which facilitated services reaching 124 Upazila Health Complexes. The program underwent further consolidation during the Third Health and Population Plan (1986–1991) when TB and leprosy initiatives amalgamated into the Mycobacterial Disease Control unit, culminating in the transformative introduction of the DOTS strategy during the Fourth Population and Health Plan (1992–1998).

TB treatment in Bangladesh is accessible at chest disease clinics, specialized hospitals, medical colleges, district hospitals, Upazila Health Complexes, and union-level community clinics. Patients with MDR-TB receive care through the "Zero Day Ambulatory Treatment" approach at Upazila Health Complexes, with intricate cases referred to specialized hospitals.

National Leprosy Program: Control initiatives commenced in 1965, through three government hospitals, subsequently expanding to 120 high-endemic upazilas by 1985. By 1996, the national coverage of Multi-Drug Therapy (MTD) had been achieved, culminating in the declaration of leprosy

as a non-public health concern in 1998. The focus has since transitioned towards attaining zero transmission and eradicating stigma under the auspices of the Zero Leprosy Initiative (ZLI) by 2030.

National AIDS/STD Programme (NASP): The National AIDS/STD Programme (NASP), which was launched in 1997 after the first HIV case was detected in 1989, now operates under the framework of the National Strategic Plan for 2024–2029. The program is financially supported by the Operational Plan (OP) and the Global Fund through GO-NGO collaboration. NASP operates through a mix of government, non-government, and community-based organizations. HIV Testing Services in 24 priority districts,14 government and 8 NGO antiretroviral therapy (ART) centers, 125 Key Populations (KP) intervention services facilities in 36 districts for Female Sex Workers (FSW), People Who inject Drugs (PWID), Men having sex with men (MSM), Male sex worker (MSW) and Hijra/transgender (TG) population. Five government tertiary hospitals provide specialized services to pregnant women. Program focuses on HIV testing and counseling, ART, Harm reduction, Condom promotion, Health education, management of opportunistic infections, behavior change communication, and capacity building for health service providers. Since November 2012, NASP procures 100% of Antiretroviral (ARV) drugs.

Program for Malaria and Aedes Transmitted Diseases: The National Malaria Elimination Program has evolved from conventional control measures to a comprehensive elimination strategy. The initiative has successfully distributed 16 million insecticide-treated nets (ITNs), achieving an impressive 97.6% household coverage across 13 endemic districts. Targeted interventions are concentrated in the Chittagong Hill Tracts, with the aspiration to reduce the API to below 1 per 1,000 individuals at risk. A sharp rise in cases in 2022 (18,195 cases) was linked to unusual rainfall patterns and increased population movement after the COVID-19 pandemic. Fortunately, the incidence of cases diminished in the subsequent years through effective hotspot management and enhanced Information, Education, and Communication/Behaviour Change Communication (IEC/BCC) activities, fostering community engagement at all levels.

National Kala-azar Elimination Program: In 2023, Bangladesh garnered recognition from the World Health Organization as the inaugural nation to eradicate kala-azar as a public health menace. This remarkable achievement was realized through meticulous mapping, extensive mass drug administration, and vigilant surveillance across 100 endemic upazilas in 26 districts. The reduction in cases has been nothing short of remarkable, plummeting by an astounding 99% from 7,640 cases in 2000 to a mere 87 cases in 2024.

Lymphatic Filariasis Control: The National Programme on Elimination of Lymphatic Filariasis (NPELF), inaugurated in 2001, has instituted a comprehensive array of interventions across 19 endemic districts. Through the persistent implementation of mass drug administration and rigorous surveillance activities, Bangladesh has attained validation from the World Health Organization in 2022 for the successful elimination of lymphatic filariasis.

Zoonotic Disease Program: Human behaviour, the substantial prevalence of both animal and human populations, an expanded animal–human interface, numerous live animal markets, diverse wildlife, urbanization, deforestation, and fragile ecosystems collectively render Bangladesh a critical global hotspot for zoonotic spillover to humans. The Government of Bangladesh has identified six diseases-- namely anthrax, brucellosis, Nipah virus, rabies, zoonotic influenza, and zoonotic tuberculosis-- as priority zoonotic diseases through a comprehensive one-health zoonotic disease prioritization initiative, with a particular emphasis on the eradication of rabies as a significant public health concern. The program has successfully established 410 animal bite management centers and enhanced the capacity of 4,000 skilled personnel to conduct mass dog vaccination campaigns.

Another zoonotic viral disease, Nipah virus (NiV) infection, is an exceedingly lethal emerging zoonotic affliction caused by a newly identified Henipavirus. Over 300 human cases were documented from 2001 to 2020, with a staggering case fatality rate of 70%. In Bangladesh, the majority of NiV outbreaks have been observed during the winter months (December to March). Nipah virus infection among humans in Bangladesh is predominantly linked to the consumption of NiV-contaminated raw date palm sap, which is typically contaminated by fruit bats during the winter season.

Antimicrobial Resistance (AMR) containment, along with the control of Viral Hepatitis and Diarrhoea, positions the CDC as the principal entity for national coordination in the One Health paradigm. This initiative establishes a framework for multisectoral coordination and governance, underpinned by the National Strategy and Action Plan for Antimicrobial Resistance Containment in Bangladesh (2023-2028). Furthermore, this program significantly contributes to alleviating the disease burden associated with Viral Hepatitis and diarrhoea.

Programs for International Health Regulation (IHR), Migration Health, Emerging and Reemerging Diseases, and Influenza Control: Bangladesh is legally obligated under the International Health Regulations (IHR) 2005, which came into effect on June 15, 2007, mandating nations to cultivate robust disease surveillance systems, identify potential threats, evaluate public health emergencies, and respond to health crises. The IHR 2005 framework has laid the groundwork for operational communication and coordination among stakeholders and sectors in the detection, assessment, and management of public health events. Bangladesh has adeptly leveraged these capacities during the COVID-19 pandemic by enhancing selected health facilities and laboratories to bolster its capacity for health emergency preparedness.

Bangladesh confronts formidable health security challenges through its 32 points of entry, comprising 24 land ports, 3 seaports, 3 international airports, and 2 rail stations, which serve as potential conduits for the importation of infectious diseases. Additional vulnerabilities encompass millions of Bangladeshi expatriate laboring abroad without sufficient health insurance, the hosting of displaced populations from Myanmar in the Cox's Bazar district, and the ramifications of climate change that exacerbate vector-borne diseases such as dengue, Zika, and chikungunya. These conditions foster increased mosquito breeding sites and alter transmission dynamics, necessitating enhanced cross-border surveillance collaboration with India and Myanmar.

Strategic Objectives

To eradicate or mitigate the prevalence of communicable diseases in Bangladesh.

Table 4.3.1. Delineates the objectives aimed at eradicating or alleviating the prevalence of communicable diseases in Bangladesh.

Disease / Program	Key targets and strategic goals
Tuberculosis (TB)	• End the TB epidemic by 2035 with 95% reduction in deaths and 90% reduction in incidence. • Maintain a treatment success rate above 95%. • Achieve 95% case detection and universal drug sensitivity testing. • Achieve 75% reduction in TB deaths and 50% reduction in incidence by 2025.

Disease / Program	Key targets and strategic goals
Leprosy	• Achieve Zero Leprosy by 2030 — zero infection, zero disability, zero stigma. • Reduce detection rate to <2 per 100,000 population in all districts. • Implement Single Dose Rifampicin (SDR) as preventive treatment.
HIV/AIDS	• End AIDS by 2030 in alignment with Sustainable Development Goal 3.3.1. • Achieve 95-95-95 targets: 95% know their status, 95% on treatment, 95% virally suppressed. • Eliminate mother-to-child transmission of HIV.
Malaria	• Reduce API to <1 per 1,000 population at risk in CHT districts by 2025. • Eliminate indigenous malaria in 10 endemic districts through a phased approach. • Prevent and control Aedes-transmitted diseases (dengue, chikungunya, Zika).
Kala-azar (Visceral Leishmaniasis)	• Sustain elimination status and achieve zero indigenous transmission by 2030. • Maintain incidence <1 per 10,000 population in all previously endemic areas. • Achieve a Kala-azar-free Bangladesh by 2030.
Rabies	• Eliminate rabies by 2030 through a phased approach. • Achieve zero human rabies deaths in 70 upazilas by 2025, 200 upazilas by 2028, and nationwide by 2030.
Other Vector-borne and Neglected Tropical Diseases	• Prevent and control Aedes-transmitted viral diseases including dengue, chikungunya, and Zika. • Achieve filaria elimination (mf <1%) status by 2022. • Reduce STH prevalence among 5–16-year-old children to <6% by 2023.

Cross-Cutting Objectives

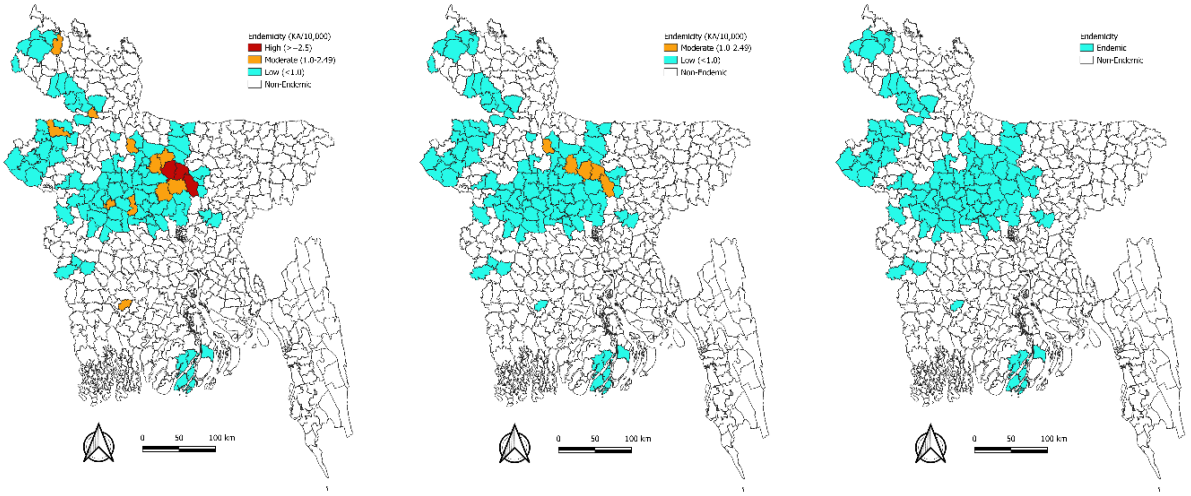
- To strengthen the core capacities of the International Health Regulations (IHR) across all 32 ports of entry, ensuring compliance with the IHR 205 framework.
- To mitigate antimicrobial resistance through vigilant surveillance and comprehensive stewardship.
- To enhance climate-resilient health systems for the prevention of vector-borne diseases.
- To enhance the coordination of One-Health initiatives for the prevention of zoonotic diseases.
- To cultivate fundamental capacity at designated Points of Entry in accordance with the International Health Regulations (IHR) 2005, thereby mitigating the international transmission of diseases such as COVID-19 and Ebola, it is imperative to implement comprehensive health screenings for passengers at these Points of Entry (PoEs).
- To detect, evaluate, notify, report, and respond to Public Health Emergencies of International Concern (PHEIC).
- To enhance disease surveillance and augment the capacity for detection, isolation, contact tracing, quarantine, prevention, control, and management of communicable diseases.
- To mitigate the transmission of communicable diseases among the forcibly displaced Myanmar nationals (FDMN).

- To mitigate the prevalence of antimicrobial resistance (AMR) in Bangladesh.

Current Status and Trends

Eliminated Diseases

Kala-azar (Visceral Leishmaniasis): Kala-azar continues to be endemic across 100 Upazilas in 26 districts of Bangladesh. In 2024, only 87 cases were reported, reflecting an astonishing 99% decline since the year 2000, which recorded 7,640 cases. The associated mortality rate has significantly decreased from 24 deaths in 2000 to merely 2 deaths in 2024. Geographic analysis indicates that 92% of the cases in 2024 originated from 40 endemic upazilas, with the remaining 8% arising from non-endemic regions. Notably, all 100 previously endemic upazilas have maintained an elimination status (fewer than 1 case per 10,000 population) since 2017 (refer to Annex). Ongoing efforts include cluster searches and contact screenings.



Kala-azar incidences in 2012 | **The prevalence of kala-azar in the endemic upazilas during the year 2014** | **The incidence of kala-azar in endemic upazilas from 2017 to 2024**

Figure 4.3.1. The prevalence and incidence of Kala-azar in Bangladesh throughout the years.

Lymphatic Filariasis: Current initiatives concentrate on sustaining elimination status through ongoing surveillance and comprehensive disability management programs. A total of 390 LF patients underwent training on MMDP at community clinics in Dinajpur, while 270 patients participated in similar training in Kurigram.

Leprosy: The program identified 3,519 new cases in 2024, with prevalence sustained at 0.18 per 1,000 population, significantly below the elimination threshold. The New Case Detection Rate is reported at 2.12 per 100,000 population. Cases among children totaled 158 (4.49% of total cases), suggesting persistent transmission dynamics. The Grade 2 disability rate remains at 6.54%. The geographic distribution encompasses 12 highly endemic districts (red zones) and 6 endemic districts (orange zones).

Controlled Diseases

Tuberculosis:

Bangladesh's tuberculosis control program exemplifies remarkable efficacy, attaining a 96% treatment success rate that exceeds the global benchmark of 95%. In 2024, case notification

reached an impressive 313,004, constituting 98% of the targeted 319,118 cases. Through persistent endeavours to enhance the detection of smear-negative and pediatric TB cases, with particular focus on underserved regions and social support for ultra-poor populations, case notification rates have surged significantly from 103 per 100,000 population in 2006 to 184 per 100,000 in 2024. Furthermore, TB mortality has diminished by 34% in 2023 compared to the baseline year of 2015, owing to early diagnosis initiatives.

Community-based case detection has emerged as a pivotal component cof the program, constituting 55% of all notifications. To bolster this community engagement initiative, 410 training sessions were conducted, effectively reaching over 10,000 healthcare professionals and facilitating robust community-level TB identification and referral systems. The program has achieved significant strides in tuberculosis preventive treatment (TPT), with 177,071 contacts enrolled following meticuious contact investigations. During 2024, among 184,352 bacteriologically confirmed cases, 395,588 contacts underwent thorough investigation, resulting in 177,071 successfully registered for TPT. The trajectory of TPT enrollment during 2023 and 2024 underscores a remarkable accomplishment, with enrollments surpassing established targets in the third and fourth quarters of both years.

Digital transformation has fundamentally revolutionized program management through the comprehensive implementation of the eTB Manager system, achieving a remarkable 100% electronic reporting rate. The coverage of molecular diagnostics has experienced a dramatic expansion,soaring from 26% to 54% between 2023 and 2024,thereby significantly enhancing diagnostic precision and treatment monitoring capabilities. Cutting-edge technologies, including GeneXpert, TrueNat, eTB Manager, and eLMIS, are being systematically deployed to augment case detection, ensure adherence to treatment protocols,,and fortify data management systems. This is evidenced by the increase in notifications, which surged from 3,13,004 in 2024 compared to the baseline of 2,06,918 in 2015. Molecular coverage has ascended from 26% to 54% between 2023 and 2024.

Table 4.3.2. Indicator-wise Tuberculosis Program: objectives and attainment

Indicators	Target	Achievement	Explanation
TB case notification (all forms)	319,118	313,004	Number of tuberculosis cases (both new instances and relapses) reported to the national Tuberculosis Control Program.
Treatment success rate (all forms)	95%	96%	Among the notified tuberculosis cases, the number of patients who have successfully completed their treatment and achieved a cure is noteworthy.
Notified TB patients- (all forms): (contributed by private sector)	24%	23%	The quantity of reported tuberculosis cases referred from the private sector.
Notified TB patients (all forms) (contributed by public sector)	23%	23%	Number of reported tuberculosis cases referred from the public sector.
Notified TB patients (all forms) (contributed by community)	53%	55%	Number of reported tuberculosis cases referred from community-level sources.

Table 4.3.2. contd.

Table continued...			
Indicators	**Target**	**Achievement**	**Explanation**
Percentage of TB patients (all forms) with known HIV status	35%	23%	The number of tuberculosis patients who undergo HIV screening tests.
Number of TB patients (all forms) notified among prisoners	292	406	Number of tuberculosis cases reported to the National Tuberculosis Control Program from correctional facilities.
Number of people in contact with TB patients who began preventive therapy	168,010	177071	Close contacts of bacteriologically confirmed tuberculosis cases are being urged to undertake prophylactic treatment to mitigate their risk of spreading the infection.

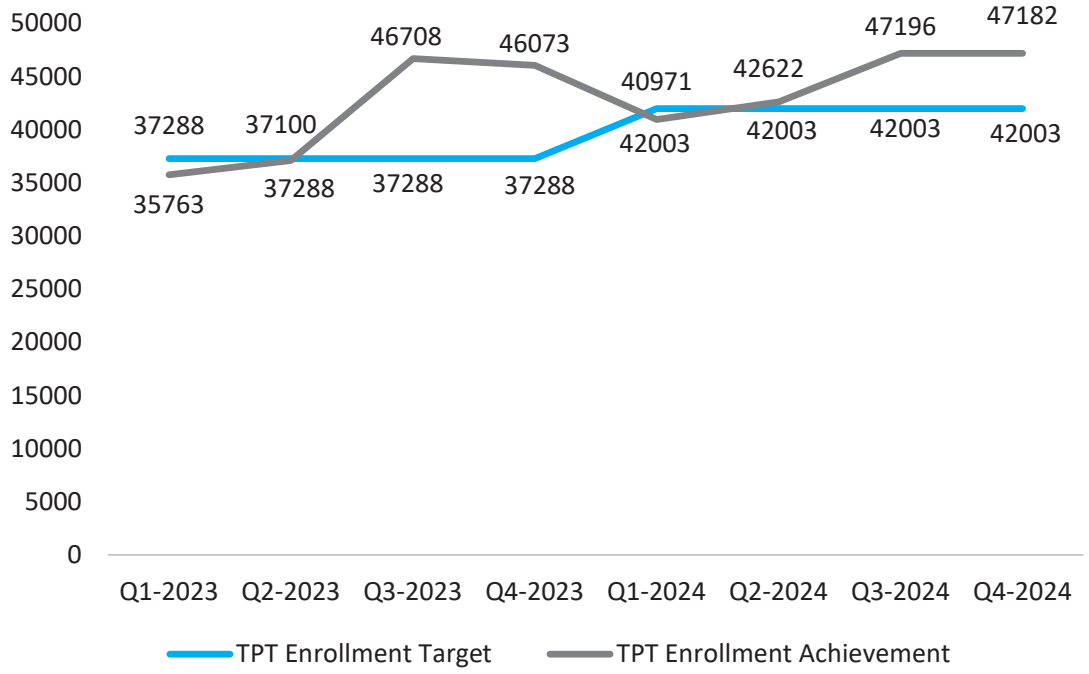


Figure 4.3.2. Coverage of Tuberculosis Preventive Treatment (TPT) for the Year 2023-2024.

HIV/AIDS

HIV prevalence remains below 0.01% within the general population, with an estimated total of 16,069 cases documented to date. Of these, 12,422 individuals (77%) have received a formal diagnosis, including 1,438 new cases identified in 2024. As of October 2024, 2,281 individuals have tragically succumbed to HIV-related causes, leaving 10,010 individuals currently living with HIV (PLHIV) in the nation.

From the 1,438 newly identified HIV-positive cases in 2024, Dhaka emerged as the epicenter reporting the highest incidence with 406 cases. Chittagong followed closely with 326 cases, of which 149 were among Rohingya refugees, while Rangpur documented a modest 44 cases. Cumulatively from 1989 to 2024, Chittagong Division has recorded the most substantial number of cases, totaling 4,212 (including 1,137 among Rohingya refugees), trailed by Dhaka Division with 3,963 cases, while Rangpur Division

has registered the fewest cases, amounting to merely 195.

Among the 10,010 individuals living with HIV (PLHIV), 7804 (78%) are actively engaged in antiretroviral therapy, with more than 90% attaining viral suppression among those who have undergone viral load assessments. While Dhaka reports the highest absolute number of PLHIV, Chittagong and Sylhet exhibit the most pronounced population-adjusted prevalence. An estimated 25-30% of PLHIV remain undiagnosed due to inadequate testing coverage. Among those who have received a diagnosis, the linkage to treatment continues to progress, although substantial challenges endure, particularly in rural locales.

Key populations, including populations who inject drugs (PWID), female sex workers (FSW), transgender individuals (TG), men who have sex with men (MSM), and Male Sex workers (MSW), exhibit significantly elevated prevalence rates, with certain groups reaching as high as 3-5% (Annex). Newly diagnosed infections are incrementally increasing, particularly among MSM and MSW demographics. Approximately 20% of newly identified HIV cases arise among migrant workers returning from regions with heightened HIV prevalence, who may unwittingly transmit the virus to their spouses and children upon their return.

The Prevention of Mother-to-Child Transmission program has attained extraordinary success, with over 97% of infants born to HIV-positive mothers testing HIV-negative for the virus since 2013. However, HIV testing among tuberculosis patients languished at a mere 23% in 2024, falling short of the 35% target. Young individuals, particularly those within key populations, are increasingly susceptible due to insufficient awareness, limited sexual health education, and engagement in perilous behaviours.

Table 4.3.3. Indicator-wise projected target of HIV cases

Sl. No.	Indicators	Unit of measurement	Means of verification (MOV)	Baseline (with year& data Source)	Projected target	
					Mid-Term target by June 2027	End target by June 2029
1.	Incidence of newly diagnosed HIV cases	Number per 1000 Inhabitants	DHIS2/ NASP	0.54 (2024)	0.04	0.02
2.	% of people know their HIV status	Percentage	AEM/PLHIV database	77% (2024)		95%
3.	% of PLHIV enrolled on ART services	Percentage	PLHIV Database	78% (2024)		95%
4.	% of PLHIV, who are virally suppressed, are enrolled in ART services	Percentage	PLHIV Database	91% (2024)		95%

Figure 4.3.3a. 2024 HIV-positive cases delineated by division

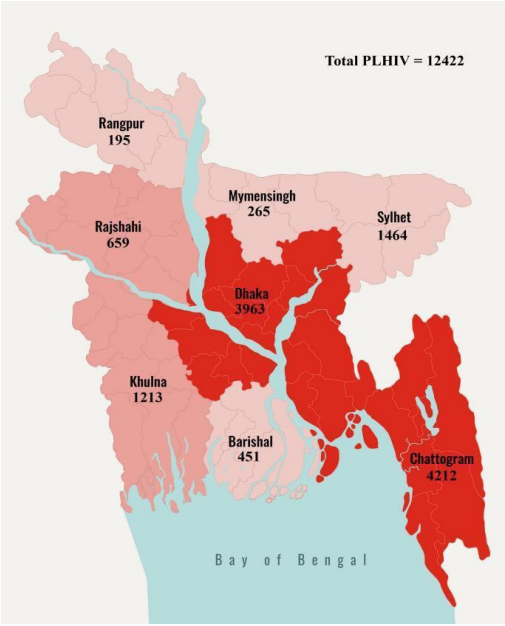


Figure 4.3.3b. Cumulative HIV-positive cases categorized by division from 1989 to 2024.

Malaria and Aedes-transmitted diseases:

Bangladesh's malaria control program achieved an 85% reduction in cases and a 96% reduction in deaths, with the Annual Parasite Index declining to 0.72 per 1,000 population. More than 85% of the population now has access to malaria treatment services within their communities, while severe malaria cases represent only 1.45% of total cases.

The program recorded significant epidemiological improvements, with malaria cases decreasing by 51% from 26,891 in 2013 to 13,100 in 2024. Deaths declined by 60% during the same period, falling from 15 fatalities to just 6 cases. Geographic distribution remains concentrated in the Chittagong Hill Tracts, with Bandarban showing the highest Annual Parasite Index at 15.62 per 1,000 population.

Notable epidemiological transformations encompass a nearly equitable distribution of P. vivax and P. falciparum cases (48% versus 52%), indicative of enhanced diagnostic proficiency and underscoring the persistance of vivax hypnozoites that necessitate rigorous adherence to radical cure protocols. This transition from a predominance of falciparum cases signifies not only improved detection capabilities but also the imperative for fortified treatment regimens for vivax malaria.

The National Malaria Elimination Program successfully distributed 16 million insecticide-treated nets (ITNs), achieving 97.6% household coverage across 13 endemic districts.
The program transformed from a control-focused approach to an elimination strategy, implementing targeted drug administration (TDA) in high-burden areas including Bandarban and Rangamati.

Targeted pre-season long-lasting insecticidal net (LLIN) distribution effectively shifts the peak transmission curve downward, with July 2024 recording 3,491 cases compared to 8,155 cases during the same period in 2015. Pre-season interventions and community engagement programs focus on breeding site elimination, while climate-sensitive disease preparedness incorporates seasonal forecasting and response capacity strengthening.

Enhanced surveillance systems actively monitor dengue, chikungunya, and Zika virus transmission patterns, with transmission typically peaking during the monsoon season (June-August) and showing a secondary surge in November-December. These integrated vector-borne disease surveillance efforts support comprehensive disease prevention and response strategies across the country.

Table 4.3.3. Program outcome for the Prevention and Management of Malaria and Aedes-Borne diseases

District	API / 1,000 population, 2024	Trend vs 2023
Bandarban	15.62	▼ 20 %
Rangamati	5.66	▼ 23 %
Khagrachhari	0.77	▼ 18 %
Cox's Bazar	0.37	-
All other endemic districts	≤0.02	- / zero

Emerging and Re-emerging Diseases

Rabies: Significant advancements are evident with cases diminishing from 82 in 2012 to 47 in 2024. The initiatives has administered 2.9 million canine vaccination doses since 2011 and established 410 animal bite management centres, a remarkable increase from the initial 66 centres. Over 3.9 million individuals have received post-exposure prophylaxis at no cost. Training programs have successfully reached 3,500 healthcare professionals, equipping them with contemporary protocols for animal bite management. The National Strategy for Dog-Mediated Rabies Elimination in Bangladesh (2024–2030) has been comprehensively costed to ensure evidence-based implementation. In 2025, a National Guideline on Integrated Bite Case Management (IBCM) was developed to standardize rabies prevention and control practices. Furthermore, the Post-Exposure Prophylaxis (PEP) Schedule was revised from the previous one-month regimen (days 0, 3, 7, and 28) to a simplified one-week regimen (days 0, 3, and 7), enhancing treatment compliance and service efficiency.

Soil-transmitted Helminthiasis: The school-based deworming initiative has achieved remarkable coverage, benefiting 39,043,177 school-aged children with an impressive program coverage rate of 93.88%. The prevalence of infection among schoolchildren has diminished to 7.95%. Furthermore, the program has successfully trained 2.25 million "Little Doctors" across 150,000 educational institutions to engage in health promotion activities.

Antimicrobial Resistance: The program operates 11 sentinel surveillance sites to meticulously monitor antimicrobial resistance. Training initiatives have successfully engaged 300 physicians in the principles of antimicrobial stewardship practices. National guidelines for antimicrobial stewardship have been disseminated to all healthcare facilities. District-level awareness workshops have been conducted across all 64 districts to advocate for responsible antibiotic utilization.

International Health Regulations Compliance

Bangladesh has successfully conducted Joint External Evaluations in both 2016 and 2024 to appraise its International Health Regulations (IHR) core capacities. There is a total of 32 designated points of entry, comprising 24 land ports, 3 seaports, 3 international airports, and 2 railway stations. The scoring for core capacities has advanced from a baseline of 3 to ambitious projected targets of 8 (mid-term) and 10 (end-term). The response to the COVID-19 pandemic exemplified the effective deployment of the existing IHR infrastructure and capacities.

Health Information Systems

Comprehensive digital health systems underpin all communicable disease initiatives. The e-TB Manager facilitates entirely electronic case-based reporting and treatment surveillance for tuberculosis. The People Living with HIV (PLHIV) database, seamlessly integrated into the DHIS2 framework, enables real-time monitoring of HIV patient management. The Electronic Logistics Management Information System (eLMIS) enhances the management of tuberculosis medications and supplies. The integrated DHIS2 platform offers cohesive reporting across all communicable disease programs.

Highlights of Program Implementation

Population-Level Interventions

- **School-based Deworming Program:** Achieved an impressive coverage of 93.88%, successfully treating 39,043,177 school-aged children
- **Little Doctor Program:** Educated 2.25 million children across 150,000 educational institutions on fundamental health assessments, hygiene promotion, and disease prevention strategies.
- **Mass Dog Vaccination Campaign:** Administered an extensive 2.9 million vaccine doses across all 64 districts since its inception in 2011.
- **Rabies Prevention Services:** Provided post-exposure prophylaxis at no cost to 3.9 million individuals
- **Vector Control Implementation:** Executed Indoor Residual Spraying encompassing 2.3 million households across 500 villages in 81 upazilas

Digital Health System Transformation

- **eTB Manager:** Achieving complete electronic reporting across all tuberculosis treatment facilities, a pilot initiative is currently underway for fully paperless documentation in the Sherpur district.
- **Integrated HIV Patient Tracking:** A comprehensive database for people living with HIV (PLHIV) has been implemented within the DHIS2 platform to facilitate real-time management of HIV patients, encompassing historical records, socio-economic status, follow-up data, antiretroviral therapy (ART) details, information on TB co-infection, and viral load status
- **TB Supply Chain Digitalization:** An electronic Logistics Management Information System (eLMIS) has been established for the tuberculosis program.
- **Unified DHIS2 Reporting Platform:** All communicable disease programs have been consolidated into a robust and comprehensive DHIS2 system.

Capacity Development Programs

- **Tuberculosis Training:** Successfully conducted 410 training sessions, benefiting over 10,000 healthcare professionals, including physicians, community health care providers, and laboratory technicians
- **Rabies Management Training:** Delivered contemporary training in animal bite management to an extensive cohort of 3,500 healthcare professionals.
- **Antimicrobial Stewardship:** Trained 300 physicians. Distributed awareness posters, conducted workshops in all 64 districts with the WHO. Organized seminars and rallies in 28 government medical colleges.
- **Disease-specific Training:** Trained 5,045 healthcare providers on kala-azar diagnosis, treatment, and surveillance (Annex). Two workshops on diarrhoea prevention and control were held in two divisions. 700 healthcare professionals trained on diarrhoea cases and fluid management.

Strengthening or Expanding Service Delivery

- Animal Bite Management: An expansion of service delivery from 66 to 410 centres, offering a comprehensive approach to rabies prevention
- HIV Service Integration: Key population services are integrated into government healthcare facilities. HIV testing and treatment services were established in 9 selected correctional facilities. Special initiative to conduct HIV tests in the ANC site at selected hospitals.
- TB Advanced Treatment Protocols: The Introduction of an innovative zero-day ambulatory treatment utilizing the BPaL/BPaLM regimen for multidrug-resistant tuberculosis
- TB Enhanced Diagnostics: Augmented molecular testing coverage for tuberculosis from 26% to 54%.
- Kala-azar diagnostic and Treatment Supplies: RDT-rK39 kits, vials of AmBisome, and Miltefosine are procurable through the UHC from endemic upazilas, tertiary medical institutions, and central repositories (annex).

Surveillance and Preparedness Systems

- Antimicrobial Resistance Surveillance: Established 11 sentinel sites for the meticulous monitoring of resistance patterns.
- Emergency Preparedness: Pre-positioned cholera rapid diagnostic test kits and oral rehydration solutions in flood-affected regions to effectively manage potential diarrheal outbreaks.
- Seasonal Nipah Surveillance: Established a comprehensive monitoring system for the Nipah virus, intricately linked to the patterns of seasonal outbreaks.
- Border Health Security: Augmented capacity for International Health Regulation at 32 designated points of entry. Migration health is intricately woven into policy formulation and preparedness initiatives.
- Climate-related disease preparedness: for dengue, Zika, and chikungunya

Community Engagement and Advocacy

- Public Health Campaigns: Conducted 495 World Rabies Day events with 870 stakeholders. Provided full Hepatitis C treatment to 166 patients. Zero-day ambulatory treatment and introduced the BPaL/BPaLM regimen.
- Community Mobilization: Successfully orchestrated 17 advocacy meetings aimed at the eradication of rabies, fostering robust engagement with local leadership.
- Behaviour Change Communication: Executed extensive awareness initiatives aimed at the prevention of dengue, malaria, and HIV.
- International gatherings: Global Meeting of the Working Group on Public-Private mix (PPM) for TB prevention and care.

Research and Innovation Initiatives

- Anti-Microbial Stewardship (AMS) guidelines: Two National Steering Committee convenings, two Collaborative Working Group meetings, and a National Technical Committee assembly on AMR to culminate and disseminate the guidelines.
- Hepatitis C guidelines: The draft of the clinical management guidelines for Hepatitis C has been finalized.
- Malaria Vaccination Research: Commenced operational research across 100 villages in the Bandarban district.
- Targeted Drug Administration: Executed comprehensive mass drug administration initiatives in malaria transmission hotspots.

- Digital Health Innovation: Implemented a pioneering paperless reporting system in the Sherpur district.
- Surveillance of Healthcare-associated Infections: Initiated comprehensive pilot surveillance programs across two tertiary healthcare institutions.
- TB Diagnostic algorithm: The formulation of this algorithm is predicated upon the district requirements of Bangladesh.

Recommendations

Policy Recommendations

a. Immediate Priority Actions:

1. Establish a budget for communicable disease control programs to reduce external funding dependency, especially for key human resource positions. Address the funding shortage from the OP/DPP funding.
2. Incorporate tuberculosis, HIV/AIDS, and antimicrobial resistance control programs into the national universal health coverage framework for programmatic sustainability.
3. Establish formal coordination mechanisms with budget allocation and clear responsibilities.
4. Mainstream climate-sensitive disease preparedness into national health planning and emergency response frameworks.

b. Medium-term strategic actions:

1. One Health Institutionalization: Establish formal coordination platforms that integrate the health, agriculture, livestock, and environmental sectors for a holistic approach to the management of zoonotic diseases.
2. Elimination Status Sustainability: Establish dedicated mechanisms and allocate resources strategically to uphold the achievements in the elimination of kala-azar and lymphatic filariasis.
3. Migration Health Policy Development: Integrate comprehensive health screening protocols for returning migrant workers into national health policy frameworks
4. International Health Regulation Compliance: Ensure sustained investment in the infrastructure of points of entry and the cultivation of specialized human resources dedicated to health security.

Operational Improvements

a. Service Delivery Enhancement:

1. Augment the proportion of HIV testing among tuberculosis patients from the current 23% to an ambitious target of 35% through the implementation of integrated service delivery protocols
2. Extend the provision of HIV testing services to encompass all 64 districts through the expansive network of government healthcare facilities.
3. Expand the coverage of molecular testing for tuberculosis beyond the current 54% through the strategic deployment of advanced equipment and the enhancement of technical capacity.
4. Enhance malaria surveillance and response coordination with neighbouring countries through formalized agreements
5. Commence malaria vaccination contingent upon the validation of its efficacy through operational research.
6. Expand targeted drug administration in malaria-prone regions of Bandarban and Rangamati, focusing on high-risk populations like jhum cultivators and forest dwellers to enhance malaria prevention efforts.
7. Evaluate the implementation of innovative strategies such as peer education, Drop-in centres, and integrated HIV Testing and Counselling (HTC) centres for individuals living with HIV.

8. Implementation of preventive strategies, such as Single Dose Rifampicin (SDR), among individuals in proximity to leprosy index cases within the community.

b. Health System Strengthening:

1. Broaden the implementation of paperless reporting systems from the current pilot initiative in Sherpur district to encompass all administrative districts
2. Strengthen the capacity of antimicrobial resistance surveillance laboratories through the implementation of standardized quality assurance protocols.
3. Implement robust systems to guarantee the uninterrupted availability of vital pharmaceuticals and diagnostic materials.
4. Establish comprehensive protocols for the systematic assessment of data quality across all communicable disease programs.
5. Involvement of multidisciplinary sectors (e.g., in the treatment of leprosy, including dermatology and venereology, orthopaedics, ophthalmology, plastic surgery, neurology etc).

c. Emergency Preparedness and Response:

1. Conduct regular International Health Regulation simulation exercises and Joint External Evaluations to enhance preparedness and response capabilities.
2. Enhance outbreak response capacity for dengue, cholera, and Nipah virus through improved surveillance and rapid response systems
3. Maintain an extensive array of health services for the forcibly displaced nationals of Myanmar residing in Cox's Bazar.
4. Establish specialized task forces dedicated to the investigation and response to emerging disease outbreaks.

d. Resource and Capacity Prerequisites

Human Resource Development:

1. Develop comprehensive strategies for transitioning positions funded by donor contributions to allocations from government budgets.
2. Establish comprehensive training programs tailored to cultivate disease-specific technical proficiencies.
3. Implement a comprehensive succession planning strategy for pivotal technical and managerial roles.
4. Expand and enhance training initiatives for Community Health Care Providers and volunteer networks

Infrastructure Investment:

1. Enhance the laboratory's diagnostic infrastructure to bolster surveillance of antimicrobial resistance and expand molecular testing capabilities.
2. Enhance the storage and distribution systems for vaccines within immunization programs through the fortification of cold chain logistics.
3. Comprehensive infrastructure enhancement at all 32 designated ports to bolster health security.
4. Invest in a resilient digital health infrastructure underpinned by comprehensive cybersecurity protocols.

Financial Sustainability:

1. Formulate comprehensive multi-year budgetary commitments to underpin sustained disease eradication initiatives.
2. Implement cost-efficient service delivery paradigms and strategic resource allocation methodologies.

3. Incorporate communicable disease interventions within national health insurance benefit frameworks.

4. Establish enduring financing mechanisms through active engagement with the private sector.

Research and Innovation Support:

1. Support the execution of implementation research aimed at the continuous refinement of programs and the generation of empirical evidence.

2. Invest in pioneering diagnostic, therapeutic and surveillance technologies.

3. Cultivate sophisticated disease surveillance and early warning systems.

4. Establish comprehensive documentation and institutional learning platforms.

Technical Notes

Data Sources

- Primary Health Information Systems: District Health Information System (DHIS2), Electronic Tuberculosis Manager (eTB Manager), Database for Individuals Living with HIV, and the National Malaria Elimination Program's Logistics Management Information System
- Program-specific Reporting: Comprehensive annual reports for national programs, quarterly surveillance analyses, and monthly performance monitoring datasets.
- Surveillance Networks: Sentinel sites for antimicrobial resistance, seasonal monitoring, of the Nipah virus, vector surveillance systems, and comprehensive outbreak investigation reports.
- International Data Sources: Comprehensive Global Reports from the World Health Organization concerning tuberculosis, HIV/AIDS, and antimicrobial resistance; Database from the Joint United Nations Program on HIV/AIDS.
- Evaluation and Assessment Reports: Joint External Evaluations, comprehensive program reviews, rigorous impact assessments, and external validation reports.

Data Collection Methods

- Real-time Electronic Reporting: eTB Manager and PLHIV database systems equipped with instantaneous data entry capabilities.
- Routine Surveillance Systems: Monthly and quarterly facility-based reporting conducted through standardized protocols.
- Active Surveillance Activities: Contact tracing, cluster investigations, proactive case identification, and outbreak inquiries.
- Survey-based Data Collection: Behavioural surveillance surveys, drug resistance assessments, and coverage evaluations.
- Web-based Reporting Platforms: Management Information System portal administered by the Directorate General of Health Services.

Data Update Frequencies

- Daily Reporting: Emergency disease surveillance, outbreak notifications, and critical incident documentation
- Monthly Updates: Tuberculosis case notifications, HIV treatment monitoring, and antimicrobial resistance surveillance
- Quarterly Reporting: Comprehensive program performance indicators, financial expenditure tracking, and strategic planning updates
- Annual Assessments: Through program evaluation, strategic planning processes, and comprehensive impact assessments

- Event-based Reporting: Outbreak investigations, emergency response evaluations, and epidemiological inquiries.

Quality Assurance Mechanisms

- Data Validation Systems: Automated dashboard validation assessments, cross-verification protocols, and consistency evaluations.
- Supervisory Activities: Regular onsite oversight employing standardized checklists and performance monitoring instruments
- Data Quality Audits: Periodic comprehensive evaluations, validation exercises, and accuracy assessments
- Capacity Building: Ongoing training initiatives for data managers, reporters, and system administrators.
- Feedback Mechanisms: Consistent performance feedback to reporting units and iterative enhancement processes.

Limitations and Methodological Considerations

- Reporting Infrastructure: Connectivity challenges in remote areas may result in sporadic reporting delays.
- Case Detection: Passive surveillance systems may underestimate the disease burden within hard-to-reach populations.
- Data Quality Variation: The calibre of reporting may fluctuate across various healthcare facility tiers and geographical regions.
- Resource Constraints: Insufficient diagnostic capacity in peripheral healthcare establishments may hinder case confirmation.
- Population Mobility: Cross-border population movement may adversely affect the comprehensiveness of surveillance and the efficacy of contact tracing.

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National Strategic and Policy Documents

1. National Strategic Plan for Tuberculosis Control in Bangladesh (2021-2025)
2. National Strategic Plan for HIV/AIDS Response (2024-2029)
3. National Strategy and Action Plan for Antimicrobial Resistance Containment in Bangladesh (2023-2028)
4. National Strategic Plan for Malaria Elimination and Prevention of Re-introduction (2024-2030)
5. National Strategic Plan for Leprosy Control in Bangladesh (2023-2030)
6. National Strategy for Dog-Mediated Rabies Elimination in Bangladesh (2024-2030)

Annual Program Reports

1. National Tuberculosis Control Program Annual Report 2024
2. National AIDS/STD Programme Annual Report 2024
3. Communicable Disease Control Program Annual Report 2024
4. National Malaria Elimination Program Annual Report 2024
5. National Leprosy Elimination Program Annual Report 2024
6. Zoonotic Disease Control Program Annual Report 2024

International Reference Documents

1. World Health Organization Global Tuberculosis Report 2024
2. Joint United Nations Programme on HIV/AIDS Global AIDS Update 2024

3. World Health Organization Global Health Observatory Database
4. International Health Regulations (2005) Third Edition
5. World Health Organization South-East Asia Region Disease Elimination Reports

Technical Guidelines and Protocols

1. National Guidelines for Tuberculosis Control (Current Edition)
2. National Guidelines for HIV/AIDS Case Management
3. National Guidelines for Malaria Diagnosis and Treatment
4. National Guidelines and Technical Manual on Leprosy (Fifth Edition)
5. National Guidelines for Rabies Prevention and Control
6. National Guidelines for Antimicrobial Stewardship in Healthcare Facilities

Non-Communicable Disease Control

Key Highlights:

In 2024, Bangladesh accelerated efforts to tackle the rising NCD burden—responsible for nearly 70% of deaths—through the National NCD Control (NCDC) Program of DGHS. The program expanded 180 protocol-based NCD corners at Upazila Health Complexes, providing screening, treatment, and referral services for hypertension, diabetes, and other chronic conditions. Over 775,000 patients were registered and managed with improved access to medicines and follow-up care.

A major milestone was the nationwide roll-out of the SIMPLE app, linking patient data to DHIS2. With over 97% of facilities using the platform, dashboards now track blood pressure and glycemic control, patient retention, and missed visits.

Bangladesh also pioneered pediatric NCD care by developing the first National Treatment Protocol (with UNICEF and icddr,b) for six conditions, including asthma, epilepsy, and type 1 diabetes. Training reached 180 physicians and 538 Community Health Care Providers, laying groundwork for national scale-up.

Mental health reform gained momentum, guided by the Mental Health Act (2018), Policy (2022), and Strategic Plan (2020–2030). Following the 2023 survey showing high prevalence (18.7% adults, 12.6% children), focus has been on early detection and referral for autism, neurodevelopmental, and psychiatric disorders. Substance abuse, though still low (alcohol 1.5%, drug use 0.6%), is an emerging youth challenge.

Despite progress, challenges persist: patient retention improved from 57% to 72%, yet missed visits remain high; control rates stand at 55% for hypertension and 23% for diabetes. Periodic drug stock-outs and limited community-level integration continue to constrain outcomes.

In summary, 2024 was transformative for NCD control in Bangladesh—expanding services, embracing digital tools, and advancing policy frameworks—while underscoring the need to strengthen retention, drug supply, and community engagement.

Background and Strategic Objectives

Background

Bangladesh is undergoing a major epidemiological shift, with non-communicable diseases (NCDs) emerging as the dominant cause of death and disability. WHO estimates that NCDs account for nearly 70% of all deaths in Bangladesh, with cardiovascular diseases alone responsible for 30%. This trend is driven by rapid urbanization, sedentary lifestyles, tobacco use, poor diet, and environmental risks. At the same time, the country continues to combat infectious diseases and maternal-child health issues, resulting in a double burden of disease.

To address this growing challenge, the Government of Bangladesh established the Non-Communicable Disease Control (NCDC) Program under the Directorate General of Health Services (DGHS). This flagship initiative aims to provide structured, protocol-based, and equitable NCD care, in alignment with the country's commitment to Universal Health Coverage (UHC) and Sustainable Development Goal (SDG) 3.4, which targets a one-third reduction in premature NCD mortality by 2030.

Bangladesh has also prioritized other critical but often neglected health domains within the broader NCD spectrum:

- Pediatric NCDs are rising globally, with 2.1 billion children and adolescents at risk. Bangladesh lacks a national program for early detection or control of NCDs in children.
- Mental health is a growing concern, affecting 18.7% of adults and 12.6% of children. Treatment gaps exceed 90%, despite the passage of the Mental Health Act 2018 and the adoption of the National Mental Health Policy (2022).
- Disability inclusion is essential for achieving equitable healthcare. Around 9.6% of Bangladesh's population suffers from hearing impairment, the second most common form of disability. Disability remains a barrier to health, education, and livelihood.
- Palliative care remains extremely limited, with only six comprehensive programs located in Dhaka, highlighting the urgent need for decentralized service models.

Together, these areas represent a broad public health mandate to not only manage chronic diseases but also create an inclusive, responsive, and resilient health system.

Strategic Objectives

The NCDC Program's long-term vision is to ensure that all Bangladeshis, regardless of geography or income, have access to timely, affordable, and high-quality prevention, diagnosis, and management services for major NCDs—integrated within the primary health system.

Core Strategic Objectives:

1. Expand NCD Services Nationwide

- Operationalize protocol-based NCD corners in all Upazila Health Complexes (UHCs).
- Ensure consistent availability of essential diagnostics and medicines.

2. Improve Clinical Outcomes

- Achieve a 20% increase in blood pressure control and glycemic control by end-2025.
- Implement tele-counseling, defaulter tracing, and real-time dashboards to enhance follow-up.

3. Strengthen Digital Health Infrastructure

- Ensure 100% use of the SIMPLE app for NCD data entry, integrated with DHIS2 for national analytics and planning.

4. Build a Skilled NCD Workforce

- Train over 5,000 healthcare providers in NCD protocols.
- Institutionalize clinical mentoring through regional centers and e-learning platforms.

5. Enhance Community and Patient Engagement

- Scale health education via the NCD Care Companion Program.
- Deploy SMS reminders, IVR calls, and helplines for treatment adherence.

6. Develop Pediatric NCD Services

- Design and pilot a pediatric NCD service delivery model at primary health facilities.
- Assess feasibility for national integration in selected areas.

7. Integrate Mental Health into Primary Care

- Implement the Mental Health Strategic Plan (2020–2030).
- Train providers using WHO's mhGAP guidelines.
- Provide psychosocial support, screen and manage priority conditions, and expand public awareness.

8. Advance Disability-Inclusive Healthcare

- Introduce disability-friendly health services and infrastructure.
- Promote inclusive care pathways for people with disabilities at all health system levels.
- Address hearing loss with targeted screening, diagnosis, and referral services.

- Develop IEC materials and integrate services into PHC delivery.

9. Scale Up Palliative Care

- Develop a national palliative care strategy under the 4th HPNSP.
- Train providers and expand services beyond Dhaka to improve quality of life for patients.

Current Status and Trends

As of 2024, Bangladesh's Non-Communicable Disease Control (NCDC) Program has emerged as one of the most robust and scalable components of the country's primary healthcare system. Anchored in the NCD corner model, currently operational in 180 Upazila Health Complexes (UHCs) across all 64 districts, the program provides structured screening, diagnosis, treatment, and follow-up care for hypertension, diabetes, and other chronic conditions.

Disease Burden and Epidemiological Profile

Non-communicable diseases account for nearly 70% of all deaths in Bangladesh, with cardiovascular diseases leading at 34% of NCD deaths, followed by cancer (14%), other NCDs (11%), chronic respiratory diseases (8%), injuries (7%), and diabetes (4%). This epidemiological profile reflects Bangladesh's ongoing demographic and lifestyle transitions, with urbanization, changes in dietary habit, and population aging driving the NCD burden.

Geographic Coverage and Service Infrastructure

The program has achieved comprehensive national coverage with 180 fully functional NCD corners across all districts. Over 1 million people have been screened through these sites, with 775,000+ patients actively registered and receiving follow-up care. Each NCD corner is staffed by trained medical officers, nurses, and SACMOs equipped with skills in WHO PEN protocols and national treatment guidelines.

Digital transformation has revolutionized program management, with 97% of facilities actively using the SIMPLE app for real-time data entry. This integration with DHIS2 enables comprehensive monitoring through national and local dashboards, allowing program managers to track patient vitals, medication adherence, and service utilization trends effectively.

Hypertension Management Performance

The program achieved a 55% blood pressure control rate among hypertensive patients, representing significant progress compared to baseline estimates of ~35% in 2021. However, 28% of patients miss their follow-up visits, undermining medication adherence and continuity of care. Registration trends show dramatic growth from 8,554 screenings in 2019 to a peak of 178,559 in 2023, followed by a decline to 127,420 in 2024, suggesting program maturation and potential saturation in high-burden areas.

Diabetes Management Outcomes

Glycemic control remains a major challenge, with only 23% of diabetic patients achieving blood sugar levels below 200 mg/dL. A concerning 36% of patients missed follow-ups, and 19% of those who attended did not have their blood sugar measured, suggesting issues with laboratory supply, timing etc. The 6% of patients with critical hyperglycemia (≥300 mg/dL) requires immediate attention and enhanced triage systems.

Monthly registration data shows steady growth from 69,378 total registered patients in October 2022 to 325,736 by December 2024, demonstrating sustained program expansion. However, the high default rates indicate the need for strengthened community linkages and patient tracking systems.

Workforce and Digital Integration

The program has trained over 850 healthcare providers in NCD protocols, with ongoing refresher courses delivered through hybrid

and e-learning platforms. The SIMPLE mobile app, integrated with DHIS2, ensures real-time data entry at all corners, enabling national and subnational dashboards that guide patient follow-up, medication tracking, and resource allocation.

1. 180 NCD corners fully functional across 64 districts.
2. 100% digital reporting through the SIMPLE app and DHIS2.
3. 850+ health workers trained in PEN protocols and digital tools.
4. Follow-up adherence improved by 15 percentage points.
5. Medication availability ensured 85% of the time.

Average footfall at NCD corners ranges between 85 to 120 patients daily, with follow-up adherence improving from 57% to 72% following the introduction of SMS reminders and missed-visit calls. Medication availability was maintained 85% of the time, marking significant improvement in supply chain management.

Specialized Populations and Emerging Areas

Disability Prevalence and Healthcare Access:

Disability affects 2.8% of Bangladesh's population, with prevalence increasing significantly with age from 0.83% in children under 4 years to 9.83% in those 65+ years. Physical disability is most common (1.35%), followed by visual disability (0.46%).

Table 4.4.1. Prevalence of disability

Age group	Percentage (%)
<4 years	0.83
18-49 years	2.24
65+ years	9.83
Total	2.8

Mental Health Integration: The 2023 national survey found 18.7% of adults and 12.6% of children suffering from mental disorders, with treatment gaps exceeding 90%. Mental health services are being piloted in 10 districts under the WHO Special Initiative, with telemedicine and community awareness programs.

Pediatric NCD Development: Bangladesh developed its first national treatment protocol for pediatric NCDs, covering six priority conditions. Over 180 healthcare professionals and 538 Community Health Care Providers have been trained, with services tracked through OpenMRS platform.

The digital transformation through SIMPLE app deployment has enabled real-time monitoring, representing a major shift from pre-2021 paper-based reporting. However, further integration with DHIS2 and continued training for frontline users remains essential for sustained program effectiveness.

Key Indicators

The NCDC Program tracks a robust set of quantitative indicators on a monthly and quarterly basis through the SIMPLE app and DHIS2 platform. These indicators offer critical insights into the program's coverage, clinical effectiveness, patient adherence, and health system performance.

Below is a summary of the key indicators for hypertension and diabetes management in 180 Upazila Health Complexes (UHCs), covering data from October to December 2024:

Table 4.4.2 Hypertension (HTN) Indicators

Indicator	Figure
Total registered patients (HTN/ HTN+DM)	449,353
Controlled blood pressure (<140/90 mmHg)	186,911 (55%)
Uncontrolled blood pressure	55,047 (16%)
Missed follow-up visits	95,315 (28%)
Visited but BP not measured	1,638 (1%)

Interpretation

The program achieved a 55% control rate among hypertensive patients, which reflects significant progress compared to baseline estimates of ~35% in 2021. However, nearly one in three patients still miss their follow-up visits. This undermines medication adherence and continuity of care. A subset of visits (1%) lacked BP measurement, usually due to equipment issues or lack of provider orientation, highlighting the need for better site-level troubleshooting.

Table 4.4.3. Diabetes Mellitus (DM) Indicators

Indicator	Figure
Total registered patients (DM/ DM+HTN)	325,705
Missed follow-up visits	90,838 (36%)
Blood sugar not taken during visit	47,284 (19%)
Blood sugar ≥300 mg/dL	15,865 (6%)
Blood sugar 200–299 mg/dL	40,763 (16%)
Blood sugar <200 mg/dL	56,309 (23%)

Interpretation

Glycemic control remains a major challenge. Only 23% of diabetic patients had fasting blood sugar below 200 mg/dL, with 6% in critical hyperglycemia (>300 mg/dL). A striking 36% of patients missed follow-ups, and 19% of those who came did not have their blood sugar measured, suggesting issues with lab supply, timing, or staff confidence. This underlines the need for more decentralized lab services, POCT (Point-of-Care Testing), and triage systems prioritizing high-risk patients.

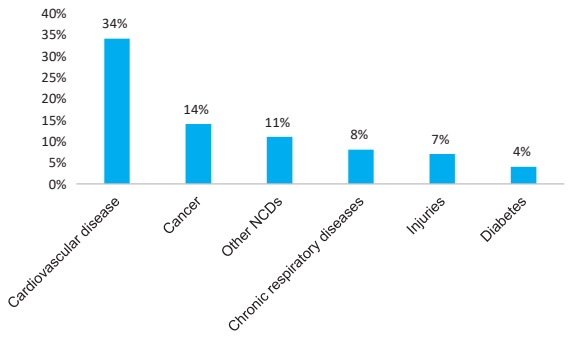

Figure 4.4.1. Major causes of death due to NCDs in Bangladesh

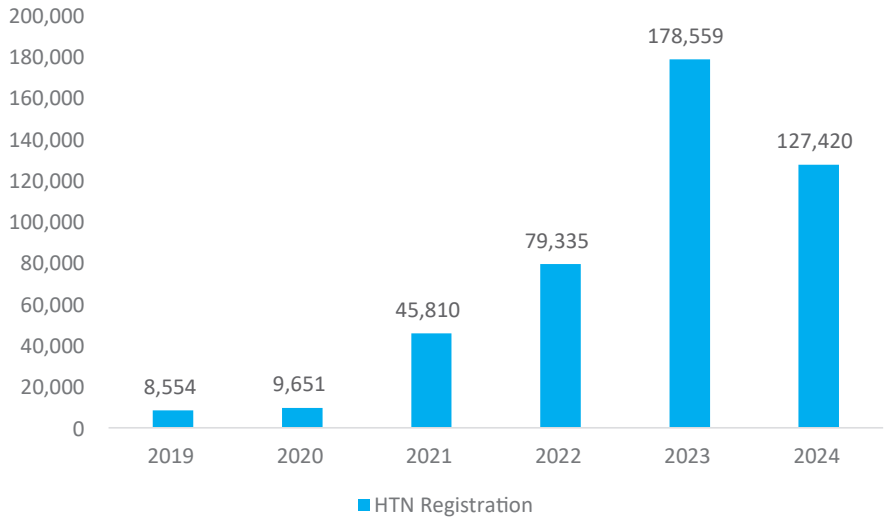

Figure 4.4.2. Registration for hypertension through apps, 2019-2024

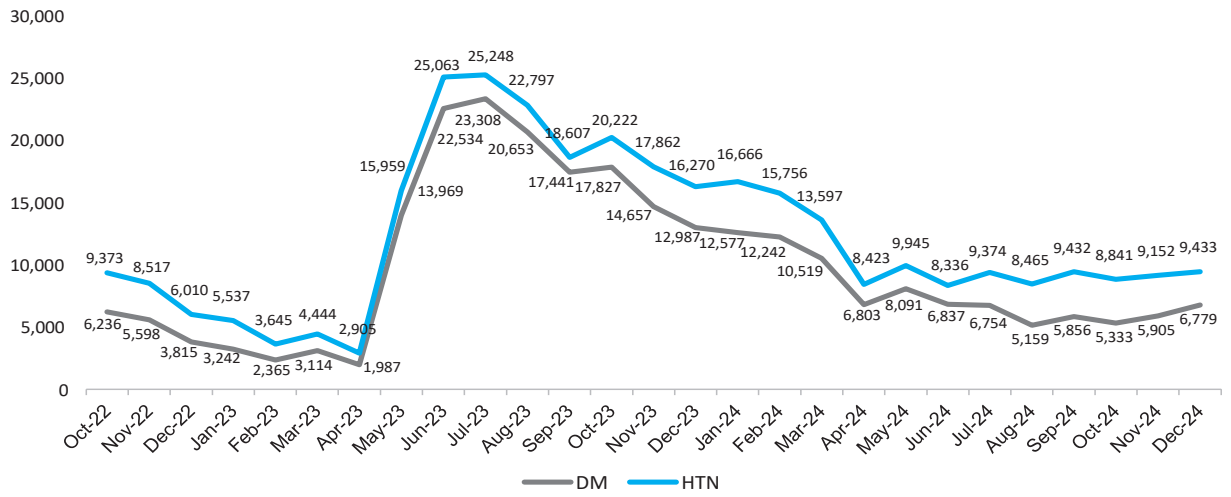

Figure 4.4.3. Total no. of patients who have HTN registration till December 2024

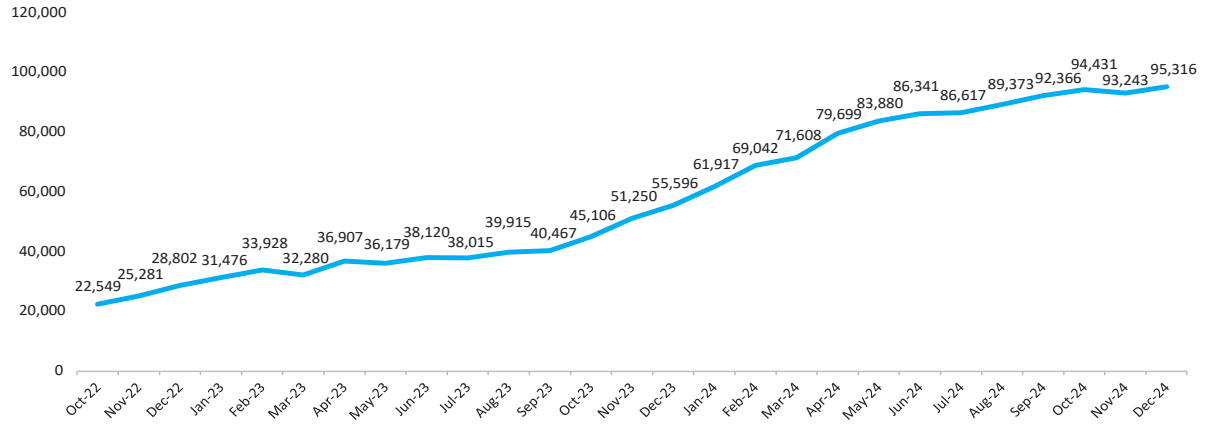

Figure 4.4.4. No. of patients who have missed visit for hypertension till December 2024

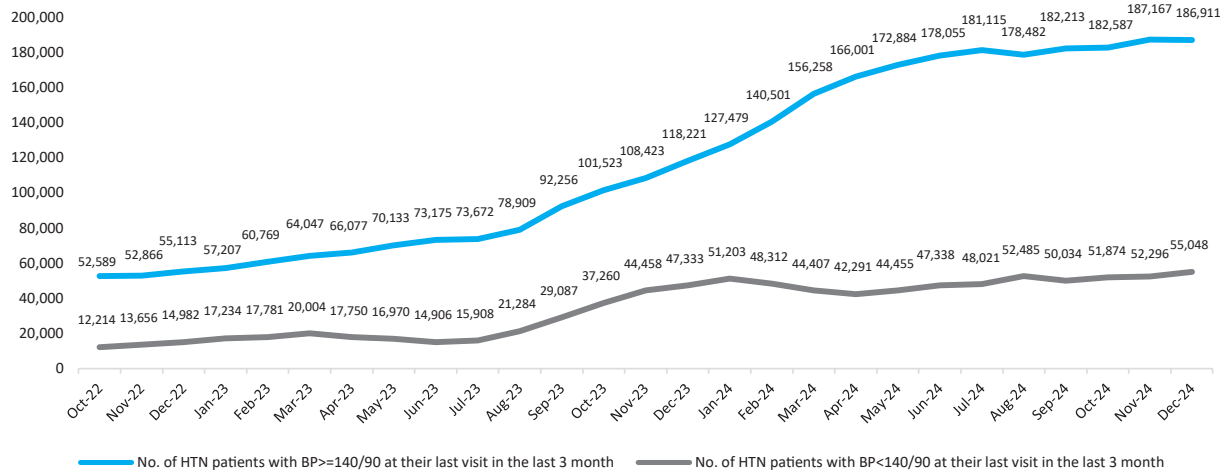

Figure 4.4.5. Data on hypertension from NCD Corner

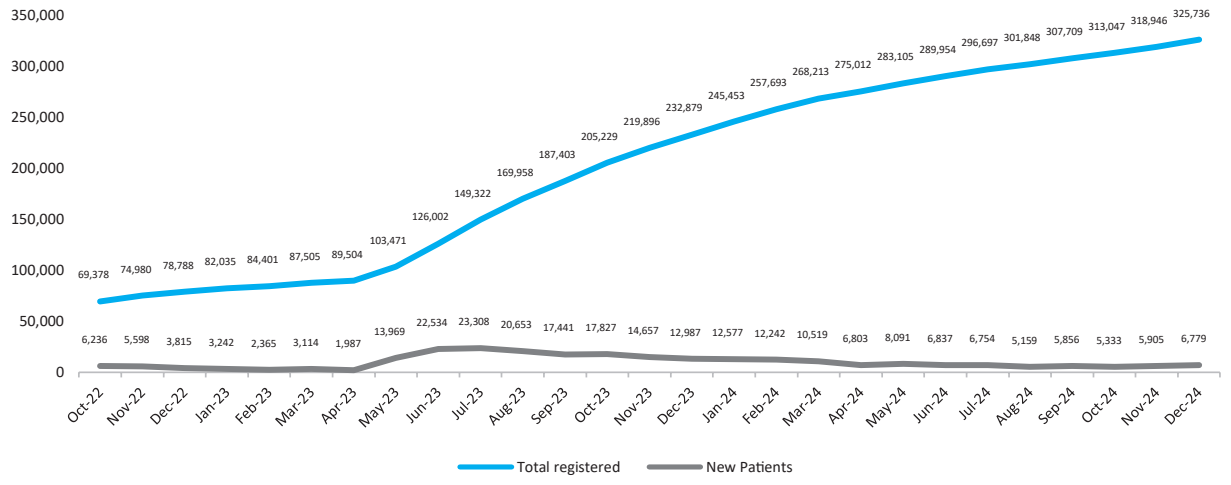

Figure 4.4.6. Total no. diabetes patients who have DM registered at the NCD corner till December 2024

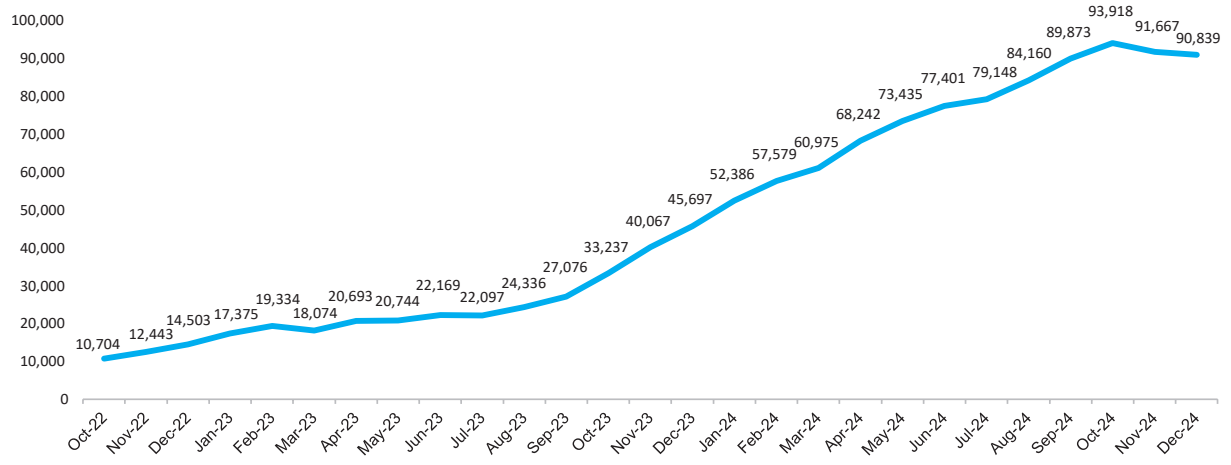

Figure 4.4.7. No. of diabetes patients, who have missed visit for diabetes in December 2024

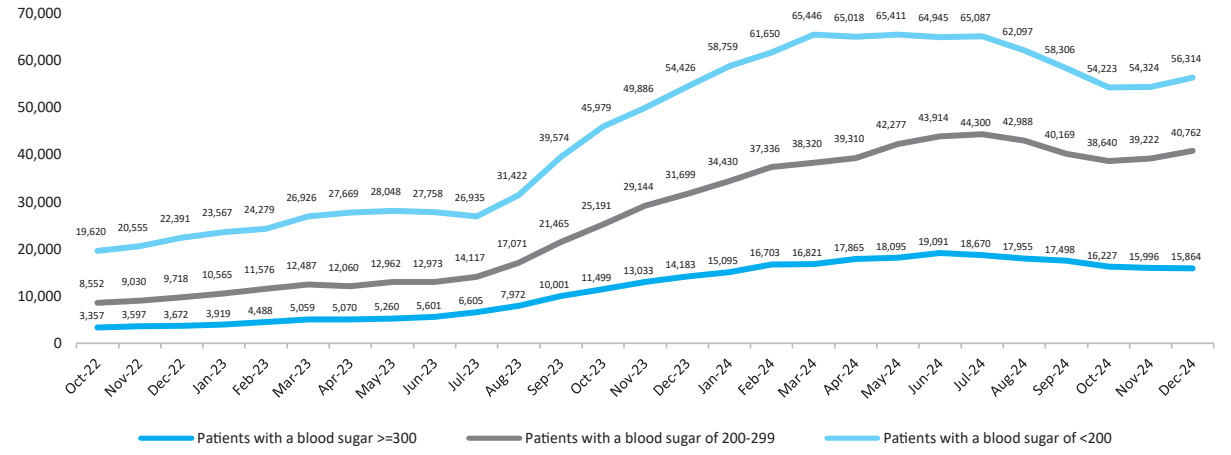

Figure 4.4.8. Data on diabetes mellitus from NCD Corners [Percentage of diabetes patients having their blood sugar controlled or not]

Program Implementation Highlights

In 2024, the NCDC Program shifted focus from scale-up to quality assurance, digital integration, and institutional sustainability. The year marked a consolidation phase with several important milestones across service delivery, technology, capacity building, and strategic partnerships.

Service Delivery Expansion and Innovation

- NCD Corner Strengthening: Expanded to 180 fully functional NCD corners across all 64 districts, each equipped with BP monitors, glucometers, lifestyle education tools, and digital tablets with the SIMPLE app
- Community Clinic Integration: Launched Community Clinic-based medicine refills for stable NCD patients to increase accessibility and reduce patient burden
- Targeted Interventions: Initiated quarterly "Control Days" for patients with poor disease control, offering targeted lab tests, group counseling, and clinical mentoring
- Climate-Sensitive Care: Extended efforts to vulnerable populations in coastal districts like Satkhira and Bhola, implementing early warning surveillance linking saltwater intrusion to rising hypertension levels with pilot field interventions
- Specialized Service Development:
    - □ Developed first-ever national treatment protocol for pediatric NCDs covering 6 conditions: bronchial asthma, congenital heart disease, epilepsy, thalassemia & iron deficiency anemia, nephrotic syndrome, and type 1 diabetes
    - □ Established 22 facilities piloting disability-inclusive services with accessible toilets, wheelchairs, and specialized protocols across 64 districts
- Palliative Care Expansion: Scaled palliative care beyond Dhaka with guideline development, training, and pilot projects like 'Compassionate Narayanganj' model

Digital Health System Transformation

- SIMPLE App Deployment: Achieved 97% daily reporting across all NCD corners with real-time data entry on vitals, medications, and follow-up visits
- Advanced Digital Governance: Implemented real-time dashboards tracking patient vitals, control rates, missed visits, and drug stock levels with facility performance reviews using dashboard data at monthly meetings
- DHIS2 Integration: Enabled comprehensive national surveillance and analysis through integrated dashboards allowing program managers to monitor trends from national down to Upazila level
- Pediatric NCD Digitalization: Built dedicated PNCD information system using OpenMRS platform supporting delivery and monitoring
- Performance Monitoring: Enabled localized action planning through facility-wise dashboard reviews and peer comparison during monthly meetings

Capacity Development Programs

- Core NCD Training: Trained 850+ healthcare providers (doctors, nurses, SACMOs) in NCD protocols through hands-on refresher camps held regionally
- JICA SHAASTHO-2 Integration: Provided refresher training for 168 doctors and nurses in Cumilla, Narshingdi, and Cox's Bazar, with patient-held records and community-based field facilitation
- Pediatric NCD Specialization: Trained 180 healthcare professionals in pediatric NCD management and 538 Community Health Care Providers (CHCPs) for community-level

screening (total 700+ service providers nationwide)

- Clinical Mentorship: Piloted clinical mentoring in 12 Upazilas with bimonthly specialist visits; developed e-learning modules for national CME rollout
- Mental Health Capacity: Provided WHO mhGAP training to health workers for screening, identification, and counseling of priority mental health conditions
- Disability Training:
  - □ Provided sign language training in 50 upazilas (50 doctors, 50 nurses, 50 SACMOs)
  - □ Developed national protocols, SOPs, and training manuals for disability-friendly healthcare
- Specialized Training Programs:
  - □ Developed training materials for PHC-level ear care based on national study showing 13.3% ear disease prevalence
  - □ Conducted palliative care trainings at BSMMU with certification

Community Engagement and Behavior Change

- Patient Education Program: Conducted 2,500+ health education sessions through NCD Care Companion Program in waiting areas covering diet, medication adherence, and physical activity
- Digital Patient Support: Implemented SMS reminders and helpline calls for appointment adherence, improving follow-up rates from 57% to 72%
- Community Mobilization: Achieved 95% patient satisfaction in health education feedback and improved patient understanding of risk factors and complications
- Mental Health Community Support: Initiated suicide prevention helpline and telemedicine services with community awareness programs
- Caregiver Engagement: Launched community awareness and caregiver engagement programs for palliative care through 'Compassionate Neighbourhood' model

Quality Assurance and Supervision Systems

- Standardization: Implemented minimum service standard checklists and monthly supervision by Civil Surgeons and Program Managers to ensure quality and consistency
- Performance Review: Established systematic facility performance reviews using dashboard data at monthly meetings for localized action planning
- JICA Model Integration: Introduced district-level review workshops and supervision tools for performance tracking in pilot districts
- Data Quality Assurance: Conducted regular validation exercises with sample facility audits to cross-verify digital reports against paper records

Strategic Partnerships and Guideline Development

- WHO and BADAS Collaboration: Finalized and disseminated updated national guidelines for diabetes and hypertension management, including first edition of Bangladesh-specific Acute Coronary Syndrome (ACS) protocol
- UNICEF and icddr,b Partnership: Developed evidence-based service delivery model for pediatric patients at primary healthcare facilities with comprehensive training and operational materials
- JICA SHAASTHO-2 Program: Modeled structured NCD care in three districts with community-based field facilitation and patient-held records

- Mental Health Initiative: Implemented Special Initiative for Mental Health pilot programs in 10 districts with telemedicine, community awareness, and mhGAP-based training
- Comprehensive Guideline Development: Developed national guidelines for:
    - □ Chronic Kidney Disease, Pediatric Renal Disorders, Geriatric Care, Rheumatic Diseases, Hemophilia, and Oral Health
    - □ Palliative care guidelines for all cadres
    - □ National guideline for ear and hearing care (under finalization)
    - □ Pediatric NCD protocols finalized for 6 conditions with training extended to CHCPs and digital tracking through OpenMRS platform

Recommendations

Based on the 2024 implementation findings, supervision reports, and field-level observations, the following strategic recommendations are proposed to ensure sustainability, quality improvement, and equitable scale-up of the NCDC Program in Bangladesh.

Policy-Level Recommendations

- Integrate NCDs into the UHC Framework and Sector Programs
    - □ Institutionalize NCD services within the core Universal Health Coverage (UHC) agenda.
    - □ Align NCD activities with the Fourth Health, Population, and Nutrition Sector Program (HPNSP).
    - □ Incorporate NCD indicators into national planning and reporting tools.
- Secure Dedicated Financing
    - □ Allocate at least 500 crore BDT annually for uninterrupted supply of essential NCD medicines, diagnostics, and equipment (e.g., ECGs, fundoscopy).
    - □ Utilize buffer stock strategies and central procurement mechanisms.
- Sustain Digital Health Platforms
    - □ Recognize the SIMPLE app and DHIS2 as official national NCD surveillance tools with dedicated hosting and maintenance budgets.
    - □ Ensure data privacy, interoperability, and integration with real-time analytics.
- Expand Services to Vulnerable Populations
    - □ Mandate NCD inclusion in humanitarian and climate resilience packages.
    - □ Fund mobile outreach for displaced, remote, and climate-affected populations (e.g., salinity zones, flood-prone areas).
- Include NCDs in Health Financing Schemes
    - □ Integrate NCD consultations, diagnostics, and medicines into Shasthyo Shuroksha Karmasuchi (SSK) and future insurance schemes.
- Formalize Pediatric NCDs
    - □ Recognize childhood-onset NCDs as a routine service under PHC.
    - □ Scale pediatric NCD protocols and services across all UHCs.
- Strengthen Government and Development Partner Commitment
    - □ Ensure long-term technical and financial support for NCD interventions.

Operational and System-Level Recommendations

a. Service Delivery Enhancement:

- Strengthen Follow-Up and Adherence
    - □ Expand use of SMS/IVR reminders and digital defaulter tracking.

- □ Engage Health Assistants in tracing and counseling.

- Improve Drug and Supply Chain Management
  - □ Enable local digital stock tracking and automated forecasting.
  - □ Establish coordination with CMSD for proactive replenishment and emergency procurement.
- Decentralize Care for Stable Patients
  - □ Authorize Community Clinics to provide medicine refills for stable patients tracked through NCD corners.
- Strengthen Referral and Complication Management
  - □ Equip at least 60% of NCD corners with fundoscopy, ECG, HbA1c, creatinine, and lipid profile capacity by 2025.
  - □ Formalize referral and counter-referral pathways to higher-level facilities.

b. System Strengthening:

- Enhance Human Resource Capacity
  - □ Institutionalize induction training for newly posted UHC staff.
  - □ Expand clinical mentoring and refresher training through academic and private partnerships.
  - □ Ensure adequate trained personnel for both adult and pediatric NCD services.
- Digitize Supervision and Performance Feedback
  - □ Launch a national online supervision portal with monthly self-reports, dashboard-based scoring, and two-way communication.
  - □ Introduce performance-based incentives and ranking for high-performing centers.

c. Resource and Capacity Requirements

Human Resource Development:

1. Develop strategies for transitioning donor-funded positions to government budget allocation
2. Establish systematic training programs for disease-specific technical competencies
3. Expand training for Community Health Care Providers and volunteer networks
4. Ensure adequate trained personnel for both adult and pediatric NCD services

Infrastructure and Technology:

1. Upgrade laboratory diagnostic infrastructure for molecular testing capabilities
2. Enhance digital health infrastructure with comprehensive cybersecurity measures
3. Complete infrastructure development for disability-friendly healthcare
4. Invest in robust cold chain systems for specialized medication storage

Technical Notes

The data presented in this report have been compiled through a combination of digital surveillance systems, manual verification, and routine reporting mechanisms coordinated by the NCDC Program under the Directorate General of Health Services (DGHS), Ministry of Health and Family Welfare. This bulletin summarizes data from January 2024 to December 2024, with focused performance analysis for the quarter October-December 2024, unless otherwise specified.

A. Data Sources

Data Sources

1. Primary Health Information Systems: SIMPLE app, DHIS2, OpenMRS platform for pediatric NCDs

2. Program-specific Reporting: Monthly NCD corner reports, quarterly performance monitoring data
3. Survey Data: National Mental Health Survey, National Survey on Persons with Disabilities (2021)
4. Validation Reports: Monthly supervisory visits, data quality assessments

Data Collection Methods

- Real-time Electronic Reporting: SIMPLE app with immediate data entry at point of care
- Monthly Surveillance: Standardized facility-based reporting through DHIS2
- Quality Assurance: Regular on-site supervision using standardized checklists
- Patient Tracking: Individual patient records with follow-up and treatment monitoring

B. Data Quality Assurance

To ensure accuracy and reliability:

- All SIMPLE data entries are monitored daily using backend analytics.
- DHIS2 data are reviewed monthly during divisional review meetings chaired by Civil Surgeons.
- Facilities with poor reporting quality are flagged for follow-up supervision.
- A standard 10-indicator verification checklist is used during field visits, aligned with WHO PEN and national protocols.

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Institute of Epidemiology, Disease Control and Research

Executive Summary

In 2024, IEDCR significantly enhanced Bangladesh's disease surveillance and emergency response systems through nationwide monitoring, real-time data systems, and rapid outbreak response. Notably, five fatal Nipah virus cases were detected, alongside 1.9% Japanese Encephalitis positivity and a high 62.96% rotavirus positivity, indicating a concerning diarrheal disease burden in children. Acute watery diarrhea surveillance tested 35,054 samples. Genomic sequencing surpassed 200 samples for priority pathogens, while AMR surveillance saw innovation with a mobile app and public dashboard for improved data visibility.

IEDCR led 38 outbreak investigations (16 case-based, 22 outbreak-specific), including 12 anthrax and 4 Nipah virus events, using a One Health approach. Its Field Epidemiology Training Program gained international recognition, with fellows presenting over 25 research abstracts. Community-Based Surveillance mobilized 240 trained volunteers across 12 urban wards for real-time mobile data collection. However, challenges remain due to climate-sensitive diseases, AMR trends, and funding gaps. Strengthening logistics, digital integration, and proactive disease prevention will be critical for IEDCR's future readiness.

Background and Strategic Objectives

Background

The Institute of Epidemiology, Disease Control and Research (IEDCR), established in 1976, serves as Bangladesh's national institute for disease surveillance, outbreak investigation, public health research, and workforce development. As the designated National Influenza Center (NIC) and focal institute for International Health Regulations (IHR), IEDCR operates advanced diagnostic laboratories and leads surveillance through the National Rapid Response Team (NRRT).

IEDCR operates through eight specialized departments and five laboratories, serving as the National Reference Laboratory for Japanese Encephalitis, COVID-19, Antimicrobial Resistance, and Nipah virus. The institute maintains biosafety level-2 laboratory capabilities supporting diagnostics for viral, bacterial, and zoonotic diseases. Service providers include epidemiologists, microbiologists, virologists, public health experts, and rapid response teams.

Major surveillance activities encompass Nipah virus, Japanese Encephalitis, AMR, respiratory pathogens, leptospirosis, Community-Based Surveillance, and cutaneous anthrax surveillance, alongside genomic sequencing and emergency response operations. Training programs include Data to Policy (D2P), systematic review methodologies, R software, QGIS, public health emergency management, epidemic threshold modeling, Risk Communication and Community Engagement (RCCE), and scientific writing.

IEDCR maintains comprehensive digital platforms including online dashboards for AMR surveillance and routine data submission to WHO, alongside the IEDCR website for surveillance activities, outbreak reporting, and institutional communications.

The Public Health Emergency Operations Center (PHEOC) provides 24/7 hotline services and coordinates national emergency responses through District and Upazila Rapid Response Teams. The institute's workforce development centers on the Field Epidemiology Training Program, Bangladesh (FETP-B), delivered with US-CDC collaboration. Programs include two-year

advanced courses leading to Master of Science in Applied Epidemiology, one-year intermediate courses, and specialized short-term training.

IEDCR hosts the One Health Secretariat, promoting multisectoral collaboration for zoonotic disease prevention. Through partnerships with WHO, US-CDC, UNICEF, and other organizations, IEDCR maintains technical expertise aligned with global health security frameworks. The institute has trained over 1,200 professionals on climate-health linkages and emergency preparedness, developing climate-sensitive disease surveillance systems.

Strategic Objectives

- Strengthen nationwide surveillance for emerging and re-emerging diseases.
- Expand the public health workforce through field epidemiology training programs.
- Build national capacity for emergency preparedness and rapid outbreak response.
- Conduct impactful research to contribute in public health policy and practices.
- Promote One Health collaborations for zoonotic disease prevention.

Current Status and Trends

Disease Surveillance Performance and Trends

Nipah Virus Surveillance IEDCR detected 5 Nipah virus cases in 2024, all with fatal outcomes, maintaining the alarming 100% case fatality rate characteristic of this zoonotic disease in Bangladesh. The continued detection during winter months confirms the seasonal transmission pattern linked to raw date palm sap consumption contaminated by fruit bats. This perfect fatality rate among confirmed cases emphasizes Bangladesh's persistent vulnerability to this emerging zoonotic threat and highlights the critical importance of prevention strategies focusing on behavioral interventions to reduce exposure to contaminated date palm sap.

Japanese Encephalitis Surveillance The surveillance system achieved 1.9% positivity rate among tested samples, indicating ongoing transmission of this vector-borne disease. This relatively low positivity rate suggests effective vector control measures, though continued surveillance remains essential given the disease's potential for seasonal outbreaks and severe neurological complications.

Hospital-based Rotavirus Surveillance The program detected 62.96% positivity rate among tested samples, revealing a substantial ongoing burden of rotavirus-associated diarrheal disease among children. This high positivity rate indicates significant disease burden highlights the need for enhanced WASH (Water, Sanitation, and Hygiene) interventions, strengthened vaccine coverage, and targeted nutritional support programs in vulnerable pediatric populations.

Acute Watery Diarrhea Surveillance Comprehensive testing included 20,670 rapid diagnostic tests, 10,204 PCR analyses, and 4,180 stool cultures across the surveillance network.

Leptospirosis Surveillance The surveillance system achieved 6.8% positivity rate, reflecting continued exposure risks particularly in flood-prone areas and among populations with occupational exposure to contaminated water. This moderate positivity rate confirms leptospirosis as an endemic public health concern requiring sustained surveillance and prevention efforts, especially during monsoon seasons when flooding increases transmission risks.

Anthrax Surveillance The program detected 28 positive cases from Meherpur district, indicating localized outbreak activity. This geographic concentration suggests animal-related transmission patterns typical of cutaneous anthrax and demonstrates the importance of One Health approaches integrating human and animal surveillance systems for effective prevention and control.

3.2 Laboratory and Genomic Surveillance Capacity

Genomic Surveillance Progress A total of 144 RSV and 32 SARS-CoV-2 whole genomes were sequenced to support molecular surveillance and track viral evolution. Additionally, near-complete genome sequencing of 12 Dengue virus serotype 2 samples and E1 gene sequencing of 12 Chikungunya virus samples enabled genotype identification. These efforts strengthen Bangladesh's genomic surveillance capacity and contribute to regional and global pathogen tracking.

Emergency Response and Outbreak Investigation Capacity

Outbreak Response Performance IEDCR conducted 38 outbreak investigations (16 case investigations, 22 outbreak investigations) with cutaneous anthrax leading at 12 responses, followed by 4 Nipah virus and 4 acute watery diarrhea investigations. One Health approaches were implemented in zoonotic disease investigations including Nipah virus, anthrax, and cattle death outbreaks, demonstrating growing recognition of interconnected health threats.

Program Implementation Highlights

In 2024, IEDCR implemented a wide range of critical public health activities, further strengthening Bangladesh's capacity to detect, respond to and prevent emerging health threats.

Surveillance System Strengthening and Operations

- **National Reference Laboratory Services:** Maintained specialized diagnostic capacity for Japanese Encephalitis, COVID-19, AMR, and Nipah virus with biosafety level-2 standards, conducting over 35,000 diagnostic tests across multiple disease platforms
- **Web-Based Disease Surveillance System (WBDSS) Enhancement:** Upgraded platform enabling real-time data upload from Upazila Health Complexes with improved visualization and analysis capabilities for decision-making
- **Community-Based Surveillance Expansion:** In 2024, Community-Based Surveillance (CBS) in Bangladesh was strengthened as a community-engaged early warning system across 12 wards of Dhaka South, Rajshahi, and Sylhet, with 240 trained volunteers collecting household-level data via the CBS App. Key milestones included the development and test run of the App in January, establishment of a baseline database through health promotion activities in March, and ethical clearance of the surveillance protocol in September. The App was reviewed and upgraded in October with new disease categories, followed by refresher training in November to reinforce volunteer capacity and data quality. CBS has thus matured into a functional, real-time, community-driven platform for early detection and reporting of public health threats in Bangladesh.
- **Digital Dashboard Implementation:** Launched online AMR surveillance dashboard and mobile application, enhancing data visibility and supporting rational antibiotic use among healthcare providers

Emergency Response and Outbreak Investigation Activities

- **National Rapid Response Team (NRRT) Deployment:** Conducted 38 comprehensive outbreak investigations including 12 cutaneous anthrax responses, 4 Nipah virus investigations, and 4 acute watery diarrhea investigations using standardized protocols
- **One Health Outbreak Response Implementation:** Applied integrated human-animal-environment approaches for zoonotic disease investigations including Nipah virus, anthrax, and cattle death outbreaks
- **Public Health Emergency Operations Center (PHEOC) Operations:** Maintained 24/7 hotline

services, coordinated multi-level response teams, and provided real-time situation monitoring for public health emergencies

- **International Health Regulations (IHR) Compliance Activities:** Facilitated Bangladesh's Joint External Evaluation (JEE) mission in 2024, coordinating stakeholder engagement and capacity assessment processes

Capacity Building and Training Programs

- **Field Epidemiology Training Program (FETP) Excellence:** Supported international recognition with fellows presenting 25+ research abstracts at global conferences and receiving best poster awards at ASCODD and ICID conferences
- **PHEOC Specialized Training:** Conducted Crisis & Emergency Risk Communication workshops, Global Emergency Operations Centre Simulation Exercises, and Public Health Emergency Management training for 200+ professionals
- **Climate-Health Capacity Development:** Trained 500+ professionals on climate-health linkages and 700+ healthcare professionals on climate-informed emergency preparedness and response
- **Technical Skills Enhancement:** Provided specialized training in surveillance methodologies, outbreak investigation protocols, and laboratory quality management systems

Research and Knowledge Generation Activities

- **Genomic Surveillance Operations:** Completed 200+ genome sequences across RSV (144), SARS-CoV-2 (32), Dengue (12), and Chikungunya (12) pathogens for enhanced epidemic intelligence
- **Operational Research Implementation:** Advanced studies on Henipavirus transmission ecology, zoonotic spillover prevention at live bird markets, and primary health care performance measurement
- **Scientific Publication and Dissemination:** Published peer-reviewed articles on dengue genome sequencing and SARS-CoV-2 variants, contributing to global scientific knowledge
- **Institutional Review Board Operations:** Reviewed 9 research protocols ensuring ethical standards while supporting evidence-based public health practice

Public Health Communication and Community Engagement

- **World Antimicrobial Awareness Week (WAAW) Campaign:** Launched comprehensive awareness initiatives including animated videos, hospital wall graffiti, and educational materials for healthcare providers
- **Zoonotic Disease Prevention Campaigns:** Implemented 'Bat Book' intervention and community awareness programs to reduce zoonotic spillover risks from fruit bats
- **Risk Communication Enhancement:** Developed standardized risk communication protocols and trained personnel in crisis communication for emergency response
- **Community Mobilization Activities:** Conducted community awareness meetings and stakeholder engagement sessions to strengthen local participation in disease prevention

Digital Health Innovation and System Integration

- **Mobile Health Technology Deployment:** Implemented Android-based surveillance applications for real-time data collection and transmission from field locations
- **Health Information System Integration:** Enhanced IEDCR website for surveillance reporting, outbreak documentation, and public health information dissemination
- **Electronic Reporting Systems:** Established paperless reporting pilots and digital documentation systems for improved data quality and accessibility

- **Interoperability Development:** Worked toward seamless integration between surveillance platforms and national health information systems

Recommendations

Policy Recommendations

- **Secure Sustainable Financing:** Establish long-term domestic and international funding streams to support surveillance and emergency response, reducing reliance on short project cycles.
- **Integrate into National Health System:** Embed IEDCR surveillance and emergency response within universal health coverage, health security, and broader system-strengthening initiatives.
- **Operationalize One Health:** Formalize coordination across human, animal, and environmental sectors with dedicated budgets and clear accountability for zoonotic disease control.
- **Build Climate-Resilient Health Systems:** Incorporate preparedness for climate-sensitive diseases into national health planning and emergency frameworks.
- **Advance Digital Interconnectivity:** Develop comprehensive linkages between IEDCR, district health facilities, laboratories, and international reporting platforms for real-time data exchange.
- **Strengthen Workforce Capacity:** Establish structured career pathways and continuous training for epidemiologists and public health professionals at national and subnational levels.
- **Promote Research and Innovation:** Define national research priorities, secure funding, and foster operational research to guide evidence-based decision making.
- **Enhance International Cooperation:** Expand bilateral and multilateral partnerships for cross-border surveillance, laboratory networks, and coordinated emergency response.

Operational Improvements

- **Strengthen Workforce & Logistics:** Build a skilled outbreak investigation workforce with systematic training, and ensure rapid access to essential logistics such as transport, communication, protective equipment, and surge laboratory capacity.
- **Enhance Surveillance Systems:** Expand community-based and event-based surveillance, improve laboratory diagnostics and genomic sequencing capacity, and establish standardized protocols with regular data validation and feedback to ensure data quality and timeliness.
- **Bolster Emergency Preparedness:** Establish dedicated outbreak response teams, strengthen PHEOC coordination through simulation exercises and updated protocols, and standardize investigation and reporting procedures aligned with international standards.
- **Leverage Digital & Innovative Tools:** Scale up mobile health applications for real-time reporting and community engagement, deploy AI/ML for early warning and outbreak prediction, and implement interoperable health information systems for seamless data sharing.
- **Safeguard Digital Health Systems:** Strengthen cybersecurity measures and enforce national and international data privacy standards to protect sensitive health information.

Resource and Capacity Requirements

- **Strengthen Human Resources:** Develop structured training curricula with certification for epidemiologists, laboratory staff, and responders; expand community health worker programs; establish international fellowship and exchange opportunities; and implement succession planning to preserve institutional expertise.

- **Invest in Infrastructure:** Upgrade laboratory facilities for molecular diagnostics, genomic sequencing, and AMR testing; enhance IT capacity with reliable connectivity, data storage, and analytical tools; modernize PHEOC infrastructure; and create regional hubs to expand coverage and accelerate outbreak response.
- **Ensure Financial Sustainability:** Secure multi-year government budget commitments, establish contingency funds for emergencies, and explore innovative financing such as public-private partnerships and cost-efficient service delivery models.
- **Advance Research & Innovation:** Allocate dedicated funds for operational research, foster collaborations with academic and research institutions, build knowledge management systems to capture lessons learned, and support technology incubation for surveillance and health system strengthening.

Figure 4.5.1. Conducting outbreak investigation interview in the community & hospital

Figure 4.5.2. Community awareness meeting on Bat book

Figure 4.5.3. Debriefing of Joint Review of FETPB

Figure 4.5.4. Group photo of Review team at IEDCR

Technical Notes

Data Sources

IEDCR Surveillance Databases: Comprehensive surveillance data from disease-specific surveillance systems including Nipah virus, Japanese encephalitis, AMR, rotavirus, leptospirosis, and acute watery diarrhea surveillance platforms

- **Laboratory Information Systems:** Diagnostic test results, genomic sequencing data, and quality assurance reports from IEDCR reference laboratories
- **Outbreak Investigation Reports:** Case investigation reports, outbreak investigation summaries, and response evaluation documents from NRRT activities
- **Training and Capacity Building Records:** FETP program databases, workshop attendance records, and capacity building activity reports
- **Web-Based Disease Surveillance System (WBDSS):** Routine surveillance data from Upazila Health Complexes and healthcare facilities across Bangladesh

Collection Methods

Routine Surveillance Reporting: Weekly and monthly surveillance reports from sentinel sites, healthcare facilities, and community-based surveillance volunteers

Laboratory-Based Surveillance: Systematic testing and reporting from IEDCR reference laboratories and network laboratories

Outbreak Response Data: Active case finding, contact tracing, and epidemiological investigation data collected during outbreak responses

Event-Based Surveillance: Real-time reporting through hotline services, media monitoring, and informal reporting networks

Community-Based Data Collection: Mobile application-based data collection through trained community volunteers in CBS implementation areas

Frequency of Updates

- Daily (real-time disease reporting)
- Weekly, monthly and annual update

Quality Assurance

- Surveillance sites monitoring
- Participation in the External Quality Assurance Program
- Periodic data audits

Limitations and Methodological Considerations

- **Geographic Coverage Variations:** Surveillance coverage may vary across geographic areas, with potential underreporting from remote or hard-to-reach populations
- **Diagnostic Capacity Constraints:** Limited advanced diagnostic capacity in peripheral areas may affect case confirmation and accurate disease burden estimation
- **Reporting Completeness:** Passive surveillance systems may miss cases, particularly in areas with limited healthcare access or reporting infrastructure
- **Resource Dependencies:** Surveillance activities dependent on external funding may experience interruptions affecting data continuity and quality
- **Population Mobility:** Cross-border population movement and internal migration may impact surveillance completeness and contact tracing effectiveness

References

Annual Reports and Program Documents
Surveillance Implementation Report 2024 10. National Bulletin of Public Health, Volume 4, Issues 1 & 2

International Reference Documents:

- JEE mission report (July 2024) via WHO
- GHSA Action Package definitions and frameworks

Technical Guidelines and Protocols:

Outbreak Investigation Manual for Bangladesh

Publication

- The Institutional Review Board (IRB) of IEDCR reviewed 9 protocols (2 academic and 7 general protocols).

- Two issues are published under volume 4 by the National Bulletin of Public Health (NBPH), IEDCR. Issue 1 contains 5 articles, including:

1. An Update on Dengue
2. Mobile phone-based Non-Communicable Diseases (NCDs) risk factor survey, and other pioneering activities of the Cell Phone Based Surveillance platform at IEDCR
3. Solving Lead Pollution in Bangladesh
4. International One Health Day 2023
5. Admitted Cancer Patients in Government Facilities of Bangladesh: A Descriptive Study of Cancer Demographics

And issue 2 is a special one on “A Brief Report on Disease Surveillance in Bangladesh” includes Acute Encephalitis Syndrome (AES) Surveillance, Antimicrobial Resistance (AMR) Surveillance, Cutaneous Anthrax Surveillance, Cell Phone Based Surveillance (CPBS), Child Health and Mortality Prevention Surveillance (CHAMPS), Hospital Based Rotavirus and Intussusception Surveillance (HBRIS), Leptospirosis Surveillance, National Influenza Surveillance, Nipah virus (NiV) surveillance

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Health Education, Promotion, and Lifestyle Modification

Key highlights

In 2024, the Bureau of Health Education (BHE) achieved remarkable progress in building a health-literate society through comprehensive behavior change communication and digital innovation. The Lifestyle and Health Education & Promotion (L&HEP) Operational Plan delivered exceptional outreach, reaching over 5 million people through social media platforms while conducting 660 training batches across all 8 divisions with 27,932 participants.

Digital transformation accelerated program reach through the first comprehensive social media initiative in program history. Facebook achieved 251,878 followers with 5 million people reached, while YouTube generated 102,000 subscribers and 2 million impressions. Strategic material distribution included 553,000 leaflets, 4,000 books, and 7,000 Eid cards, while 39 billboards disseminated 14.2 million health messages nationwide.

Mass media coverage expanded significantly with 1,150 days of TV scrolls, 3,130 minutes of TV spots, 975 minutes of FM radio broadcasting, and health messages published in 255 newspapers across 44 days. Community engagement achieved complete national coverage through 64 districts for dengue prevention campaigns and 56 advocacy meetings across 43 districts.

Capacity development programs demonstrated successful intersectoral collaboration with 20,382 MOHFW and 7,550 non-MOHFW participants, achieving balanced gender representation. The program strengthened information systems by equipping all field staff with digital reporting capabilities through DHIS2 integration.

Background and Strategic Objectives

Background

The Bureau of Health Education (BHE), operating under the Directorate General of Health Services (DGHS), focuses on promoting health education and behaviour change to improve public health. Its operational plan aims to enhance people's awareness, particularly among vulnerable groups, regarding health issues, access to services, and healthy practices.

L&HEP integrates its Social and Behavior Change Communication (SBCC) activities mainly through advertising and publicity, mass campaign, audio and video production, Behavior Change Communication (BCC) activities, media campaigning, design, printing and distribution of SBCC materials, preparation of annual reports and Newsletters, capacity development of HR. Additional activities encompass billboards, festoons, banners, road island decorations as well as office building illumination.

The program operates through a multi-tiered implementation approach combining field-level community engagement, central-level material development, and operational plan activities for mass communication. All field staff are equipped with laptops and internet connectivity to ensure comprehensive reporting through DHIS2 for routine activities and offline hardcopy reporting for operational plan activities.

Strategic Objectives

General Objective:

To influence the health behaviors of individuals and community as well as working and living conditions that influence health by improving their knowledge, attitude, practices, and skills to promote a 'Health Literate Society'.

Specific Objectives:

- To establish legislative framework, communication strategy, implementation strategy and intersectoral collaboration for promoting healthy lifestyles and environments.
- To enhance the execution of lifestyle and health education and promotion inititiatives at both individual and community levels
- To identify diverse target audience and tackle the preventable causes of communicable and non-communicable diseases, MNCAH issues along with emerging and reemerging health challenges
- To forge linkages with other departments of DGHS and DGFP for the implementation of respective SBCC strategies
- To leverage and establish connections with print, electronic and social media alongside effective community engagement for SBCC

Program Implementation Highlights

Information Management Systems and Digital Transformation

All field staff received equipment from MIS, DGHS, including laptops and internet connectivity to ensure comprehensive data reporting. Field-level routine activities are reported monthly via DHIS2, while operational plan activities are reported offline through hardcopy submissions following activity completion. This dual reporting system ensures complete documentation of both routine and special initiative outcomes across all administrative divisions.

The program launched its first comprehensive social media initiative in 2024, establishing Facebook and YouTube channels with remarkable engagement. Facebook achieved 251,878 followers with 5 million people reached, while YouTube generated 102,000 subscribers and 2 million impressions. This represents a significant shift toward digital health communication platforms, reflecting modern audience engagement preferences and enhanced reach capabilities.

Field-Level Health Education Activities

All field-level health education activities including awareness meetings, video demonstrations, hospital/clinic education, school education, courtyard sessions, and leaflet distribution are reported directly to DHIS2 from field level on a monthly basis. This comprehensive reporting system ensures real-time monitoring of community-level interventions across all administrative divisions.

Central-Level Material Production and Distribution

The BHE Press achieved significant production targets in 2024, developing and distributing comprehensive SBCC materials across all districts. Material distribution included 553,000 leaflets covering geriatric and palliative care (65,000), Universal Health Coverage (200,000), and evening healthcare services (288,000). Book production reached 4,000 copies focusing on geriatric care and palliative care topics, while 7,000 Eid cards were distributed nationwide.

Poster production complemented leaflet distribution with materials addressing burn prevention and first aid, dengue prevention and control, and adolescent-friendly services. The Annual Report (MOHFW) for 2021-22 and 2022-23 was printed in 1,800 copies, alongside 200 copies of the L&HEP annual performance report.

Mass Media and Digital Communication

Television and Radio Broadcasting: Television coverage achieved extensive reach with 1,150 days of TV scrolls across multiple channels. TV spot broadcasting included 700 minutes during peak time and 2,430 minutes during off-peak hours, totaling 3,130 minutes of targeted health messaging. FM radio broadcasting reached 975 minutes, with programming focused on geriatric

and palliative care (475 minutes) and Universal Health Coverage (500 minutes).

Social Media Innovation: Digital content creation included 8 podcasts, 12 live sessions, 100 static photocards, 10 infographic and CG videos, 4 special day content pieces, and 4 celebrity-promoted health messages, representing the program's first comprehensive digital health communication initiative.

Print Media Coverage: Health messages were published in 255 newspapers (223 Bangla, 32 English) across 44 publication days. Content focused on dengue prevention (21 days), heat stroke prevention (10 days), food safety during Ramadan (2 days), World Health Day celebration (1 day), National Deworming Week (2 days), and burn prevention (8 days).

Infrastructure and Billboard Installations

Billboard installations strategically targeted high-visibility locations across healthcare facilities. Traditional billboards numbered 26 installations across 26 districts, while 13 electronic billboards were installed in Government Outdoor Dispensaries, School Health Clinics, and Upazila Health Complexes in Dhaka City Corporation and Dhaka District. Electronic billboards in Dhaka North and South City Corporations disseminated 14.2 million health messages throughout 2024.

Community Engagement and Advocacy

National Campaigns: Special awareness campaigns achieved complete national coverage across all 64 districts for dengue prevention and winter health messaging. Campaign activities included miking, educational institution programs, roadshows, poster and leaflet distribution, rallies, hospital programs, and meetings with civil servants, elite society, media, NGOs, and private sector stakeholders.

Advocacy Meetings: A total of 56 advocacy meetings were conducted across 43 districts, covering geriatric and palliative care (31 districts, 6 meetings), evening healthcare services (30 days of miking activities), and Universal Health Coverage (40 districts, 40 meetings). These initiatives fostered intersectoral collaboration and community leadership engagement.

Capacity Development and Training Programs

Training programs achieved exceptional coverage across all 8 administrative divisions, conducting 660 batches with 27,932 total participants. MOHFW personnel participation included 20,382 individuals (73%), while non-MOHFW participation reached 7,550 individuals (27%), demonstrating successful intersectoral collaboration. Gender representation showed balanced participation with 15,885 male participants (56.9%) and 12,047 female participants (43.1%), reflecting inclusive capacity building approaches.

Divisional Distribution:

- Dhaka: 130 batches, 4,500 participants
- Chattogram: 110 batches, 3,220 participants
- Rajshahi: 75 batches, 3,798 participants
- Mymensingh: 70 batches, 3,437 participants
- Sylhet: 70 batches, 3,494 participants
- Khulna: 65 batches, 3,162 participants
- Rangpur: 50 batches, 3,269 participants
- Barishal: 90 batches, 3,052 participants

Recommendations

Data Management and Analysis Enhancement

- Health Education Monthly Activities in DHIS2 should be compiled annually by MIS to enable systematic performance tracking and trend analysis. Strengthen coordination between MIS and field teams to ensure timely and complete data submission across all administrative levels.

Digital Content Expansion

- Expand digital SBCC content development, particularly targeting underserved populations

through increased podcast production, enhanced live session programming, and culturally appropriate content creation. Scale successful social media engagement strategies to achieve higher reach and follower growth targets.

Campaign Optimization

- Scale successful seasonal campaigns, such as dengue prevention and winter health messaging, to address other seasonal health challenges including heat stroke prevention, food safety during religious observances, and emergency preparedness initiatives.

Capacity Building Sustainability

- Develop sustainable training frameworks to maintain the current scale of 660+ annual batches while improving training quality and follow-up support. Enhance intersectoral participation by expanding non-MOHFW engagement beyond the current 27% participation rate.

Infrastructure Development

- Expand electronic billboard installations beyond Dhaka to other major urban centers to increase health message dissemination reach. Develop standardized content management systems for billboard messaging to ensure consistent and timely health communication.

Technical Notes

Data Sources:

- DHIS2
- Reports from AHI, HI, Health Educators, and Education Officers
- L&HEP OP M&E reports
- L&HEP Operational Plan M&E reports
- BHE Press production records
- Social media analytics platforms
- Print media monitoring systems

Collection Methods:

- Routine facility-based data entry through DHIS2
- Monthly performance reports from field staff
- OP Activities reports submitted offline
- Digital platform analytics and engagement metrics
- Media monitoring and coverage analysis

Update Frequency:

- Monthly for routine data
- Activity-based for OP reports

Quality Assurance:

- Onsite supervision using standardized protocols
- Periodic data analysis and validation
- Cross-verification between DHIS2 and hardcopy reports
- Regular training for data managers and reporting staff

References

- L&HEP Operational Plan Documents
- National Health Policy
- SBCC Strategy
- WHO Guidelines on Primary Health Care
- Annual Performance Reports (2021-2024)
- Digital Health Communication Best Practices

Nutrition and Food Safety

Key Highlights

Over the past two decades, government-led interventions have significantly improved nutrition outcomes. Between 2004 and 2022, stunting in children under-5 fell from 43% to 24%, wasting from 17% to 11%, and underweight from 41% to 22%. Bangladesh has already surpassed the NPAN2, 4th HNPSP, and 8th Five-Year Plan target of reducing stunting to 25% by 2025. Stunting remains higher than the global average but lower than the Southeast Asia regional average.

However, challenges remain. Wasting has risen since 2018 (from 8% to 11%), and the prevalence of overweight has shown little reduction over the past decade. From the March 2023 PNRI report, only 0.5% of screened facility cases were SAM, and fewer than half (48%) of those identified were admitted. Bangladesh has pledged to reduce wasting as part of its N4G commitments.

Micronutrient deficiencies also persist. Anaemia among women of reproductive age increased between 2011–12 and 2019–20 (from 26% to 29% overall; iron deficiency from 7.1% to 14.1%). Among children under five, 21% are anaemic. Meanwhile, low birth weight declined from 36% (2003–04) to 22.6% (2015).

Overall, Bangladesh has made strong progress in reducing undernutrition and is on track with most NPAN2 (2016–2025), SDG, and WHA targets, particularly for stunting. Yet, wasting, anaemia, and overweight remain persistent concerns requiring focused attention.

Background and Strategic Objectives

Background

During the 4th HPNSP, nutrition gained greater visibility and was integrated into health and family planning services. Nutrition data were incorporated into DHIS2 and eMIS, and a Nutrition Information System (NIS) was established. SAM units were set up in 394 secondary and tertiary facilities.

The Bangladesh National Nutrition Council (BNNC), revitalized in 2016 under the Prime Minister's leadership, serves as the apex body for policy, strategy, and multisectoral coordination. BNNC oversees implementation of the National Plan of Action for Nutrition (NPAN2, 2016–2025), supported by an Executive Committee (chaired by the Health Minister), a Standing Technical Committee, and five thematic platforms. It coordinates across 22 ministries and sub-national committees (DNCC, UNCC), ensuring annual multisectoral nutrition workplans are developed and implemented.

Strategic Objectives of NNS & BNNC

1. Reduce malnutrition and improve nutritional status of all citizens, with a focus on children, adolescents, women (pregnant & lactating), the elderly, and underserved populations, in line with the National Nutrition Policy 2015.
2. Mainstream nutrition into national plans, policies, and programs across health, family planning, and other relevant sectors.
3. Scale up preventive and curative nutrition services nationwide, particularly targeting vulnerable groups.
4. Address the double burden of malnutrition by preventing undernutrition as well as overweight and obesity.
5. Strengthen multisectoral coordination mechanisms at national and sub-national levels to ensure joint action across ministries and stakeholders.
6. Enhance food safety systems through improved institutional and laboratory capacity.
7. Develop human resource capacity to deliver, supervise, and manage quality nutrition services at all levels.

8. Strengthen institutional capacity of IPHN and BNNC for leadership, coordination, policy guidance, and technical oversight.
9. Improve monitoring, evaluation, research, and surveillance systems (including HMIS and NPAN M&E framework) to guide evidence-based nutrition programming.
10. Promote advocacy, communication, and community engagement through sustainable SBCC, media campaigns, nutrition week observances, and dissemination of knowledge products.
11. Foster partnerships and global collaboration to mobilize resources and strengthen nutrition outcomes.

4.7.3. Current Status and Trends

Bangladesh has made remarkable progress in reducing stunting, dropping from 43% in 2007 to 24% in 2022-surpassing the 4th HPNSP target of 25% well ahead of the 2025 deadline. This rate is now below the Southeast Asia regional average, though still above global targets. The sustained decline reflects a combination of nutrition-specific and nutrition-sensitive interventions, including improved infant and young child feeding practices, expanded health service access, enhanced women's education, and broader socioeconomic development, all contributing to an enabling environment for child growth.

Table 4.7.1. Progress status of higher-level targets

Target Indicators	Baseline	Target by 2025	Current Status	Target Status
Increase the rate of initiation of breastfeeding in the first hour of birth	51% (BDHS 2014)	80%	40% (BDHS 2022)	
Increase the rate of exclusive breastfeeding in infants less than 6 months of age	55% (BDHS 2014)	70%	55% (BDHS 2022)	
Increase the rate of continued breastfeeding in children aged 20 to 23 months	87% (BDHS 2014)	>95%	85% (BDHS 2022	
Reduce stunting among <-5 children	36% (BDHS 2014)	25%	24% (BDHS 2022)	
Reduce wasting among <5 children	14% (BDHS 2014)	8%	11% (BDHS 2022)	
Reduce the rate of severe acute malnutrition (SAM) (WHZ < -3) among children under 5	8% (BDHS 2014)	<1%	2.0% (BDHS 2022)	
Reduce the proportion of underweight among <5 children	33% (BDHS 2014)	15%	22% (BDHS 2022)	
Increase Vitamin A capsule supplementation coverage in children aged 6- 59 month	62% (BDHS 2014)	99%	79% (BDHS 2022)	
Increase the rate (>15PPM) of iodized salt intake	58% (NMIS 2011-12)	90%	76% (MICS 2019)	
Control & reduce maternal overweight (BMI>23)	39% (BDHS 2014)	30%	24% (MICS 2019)	

Table 4.7.1. contd.

Table continued...				
Target Indicators	**Baseline**	**Target by 2025**	**Current Status**	**Target Status**
Increase the proportion of children aged 6-23 months receiving a Minimum Acceptable Diet (MAD)	23% (BDHS 2014)	>40%	29% (BDHS 2022)	
No increase of childhood overweight (WHZ >+2) among children under 5 years	1.40%	No increase	1.5% (BDHS 2022)	
Reduce the rate of anaemia among pregnant women	50% (BDHS 2011)	25%	28.9% (NMS 2019-20)	NA
Reduce the rate of low birth weight	23% (National LBW Survey 2016)	16%	14.8%(MICS 2019)	NA
Reduce malnutrition (Total Thinness, BMI<18.5) among adolescent girls (15-19yrs)	19% (BDHS 2014)	<15 %	18% (SFNS, 2022)	NA

Legend

On track	Off track	Not Available (NA)

Micronutrient Deficiencies and Supplementation Programs

Vitamin A Supplementation

National Vitamin A Plus Campaign - June 2024

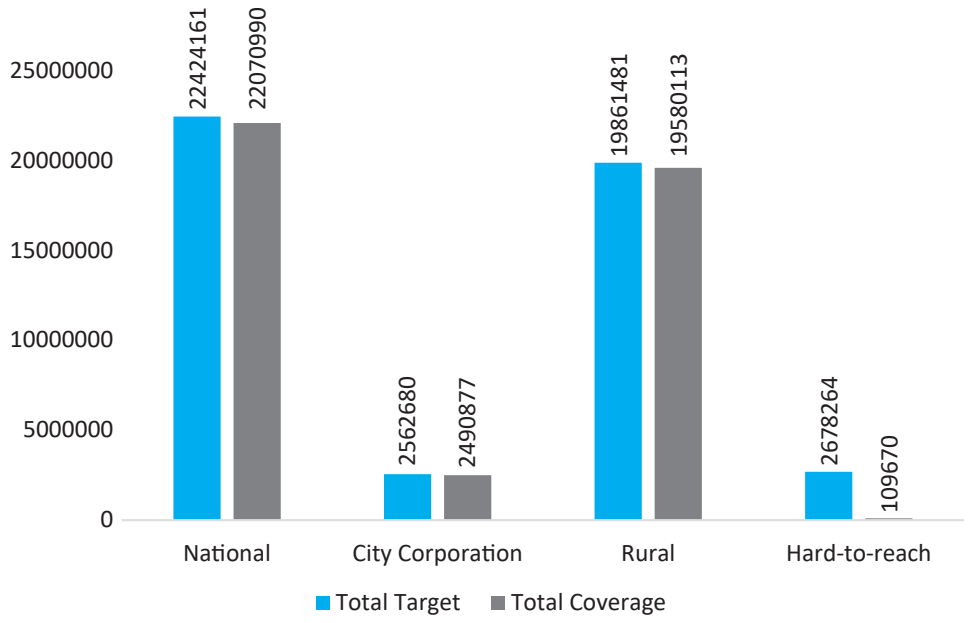

Figure 4.7.1. National Vitamin A Plus Campaign - June 2024

Table 4.7.2. SAM Program Performance Trends (2020-2024)				
Year	**Children Screened**	**SAM Cases Identified**	**SAM Admissions**	**Admission Rate**
2020	1,377,783	9,703	6,571	67.7%
2021	2,616,251	16,925	11,401	67.4%
2022	4,386,499	23,394	12,255	52.4%
2023	5,581,167	35,716	13,684	38.3%
2024	6,343,334	32,315	19,095	59.1%

Interpretation of Key Findings

Government-led nutrition interventions have markedly improved outcomes over the past two decades.

- **Child Nutrition:** Stunting declined from 51% (2004) to 24% (2022), surpassing NPAN2 and Five-Year Plan targets. Wasting fell from 15% to 11%, and underweight from 43% to 22%. Bangladesh now reports lower stunting than the SEAR average, though still above the global average.
- **Maternal & Birth Outcomes:** Underweight among women dropped from 33% (2004) to 12% (2018). Low birth weight fell from 36% to 14.8%.
- **Drivers of Progress:** Gains reflect nutrition-specific and nutrition-sensitive programs, pro-poor growth, rising incomes, longer birth intervals, smaller families, maternal education, and improved health and WASH access.

NPAN2 Priority Indicators (2016–2025)

Out of 25 tracked indicators (BDHS, MICS, HIES, program data):

- **Improved (11):** Stunting, diarrhoea treated with ORT+Zinc, adolescent height <145 cm (target achieved), thinness, early childbearing, child marriage before 18, vegetable intake, cereal share of diet, sugar intake, early childhood education, women's secondary/ higher education.
- **Declined (3):** Early breastfeeding, exclusive breastfeeding, wasting.
- **Unchanged (4):** Low birth weight, underweight under-5, anaemia (women 15–49), handwashing.
- **Deteriorated (5):** Child overweight, women overweight/obese, fruit intake, improved latrine use, improved drinking water.
- **No update (3):** Require replacement in future monitoring.

Program Implementation Highlights (NNS & BNNC)

- **Service Delivery & Capacity Building**
  - □ Continued expansion of SAM units, IMCI, and Nutrition Corners.
  - □ Strengthened capacity of 1st and 2nd line supervisors through standardized training.
  - □ Improved digital reporting and data reliability through DHIS2.
- **Multisectoral Coordination & Planning**
  - □ Developed and implemented annual nutrition plans for 22 ministries, aligned with NPAN2.
  - □ Coordinated and monitored DNCC/UNCC performance and nutrition action plan progress.

- □ Conducted multiple BNNC Act, Executive Committee, and Standing Technical Committee (STC) meetings (10th, 11th, etc.).
- □ Validated operational guidelines, frameworks, and SSNP to strengthen multisectoral nutrition programming.
- □ Supported the N4G operational framework and adoption of a multisectoral approach for nutrition (AMAN).

- **Monitoring, Research & Knowledge Sharing**
  - □ Conducted monitoring visits at subnational level (DNCC/UNCC).
  - □ Undertook research on Child Profile Estimates and Costing Models for reducing undernutrition in coastal areas.
  - □ Facilitated knowledge sharing with NINS and VAS.
  - □ Developed an NGO mapping system for improved coordination.

- **Advocacy & Awareness**
  - □ Celebrated National Nutrition Week 2024 nationwide.
  - □ Organized workshops for BNNC Annual Action Plan review and finalization.
  - □ Carried out media, advocacy, and stakeholder engagement activities to strengthen visibility of nutrition.

Recommendations

1. **Strengthen Early Childhood Development (ECD):** Integrate ECD within the IYCF component.
2. **Enhance Maternal Nutrition & Social Protection:** Link maternal nutrition programs with social protection and gender equity (SP & GE) initiatives.
3. **Promote Adolescent Nutrition:** Raise awareness on early marriage and expand adolescent platforms (e.g., Little Doctors, schools, madrassas, colleges).
4. **Improve Nutrition in Emergencies:** Conduct capacity assessments of relevant personnel and strengthen preparedness.
5. **Strengthen Nutrition Information Systems:** Incorporate DLIs & DLRs, update percentages and targets, and revise the log frame to align with SDG indicators.
6. **Address Emerging Issues:** Integrate MUNS (Multiple Forms of Malnutrition) and climate change impacts into the policy framework.
7. **Fulfill Global & National Commitments:** Support operationalization of MUNS and N4G commitments.

Technical Notes

- District Health Information System 2 (DHIS2)
- Bangladesh Demographic and Health Survey (BDHS)
- Priority Nutrition Result Indicators (PNRI) Reports
- National Vitamin A Campaign Reports
- Community Clinic Reports

Data collection Methods

- Routine Health Facility Reporting
- Population-Based Surveys
- Campaign Monitoring
- Program-Specific Monitoring

Frequency of Updates

- Monthly: Routine monitoring
- Annually: Published and secondary data sources

References

National Strategic and Policy Documents

1. National Nutrition Policy 2015
2. Second National Plan of Action for Nutrition (NPAN2) 2016-2025
3. Fourth Health, Population and Nutrition Sector Programme (4th HPNSP) 2017-2022
4. Survey and Statistical Reports
5. Program Implementation and Evaluation Documents

Community-Based Health Care

Key Highlights

In 2024, Bangladesh's Community-Based Health Care initiative attained remarkable milestones through 14,364 functional community clinics serving rural populations with over 100 million outpatient visits annually. The program demonstrates strong performance with 77.53% ANC 4+ coverage and 94.01% skilled birth attendance, while maintaining comprehensive Non-communicable disease (NCD) screening with 620,072 hypertension and 477,773 diabetes referrals.

The CBHC model exemplifies successful public-private partnership with communities donating land and government providing infrastructure, staffing, and medicine supply. Community Health Care Providers (CHCPs) numbering 14,167 deliver primary health services with average distance to facilities at 1.5 kilometers, significantly improving rural healthcare access.

Challenges persist in postnatal care coverage showing declining trends from 6.88% first visit through subsequent visits, and nutritional indicators revealing substantial malnutrition burden. Moving forward, priorities include achieving the 15,000 clinic target, strengthening PNC coverage, and ensuring sustainable financing mechanisms.

Background and Strategic Objectives

Background

The Community Clinic initiative originated during 1996-2001 to provide primary healthcare for every 6,000 rural inhabitants. After temporary suspension in 2001, it was revitalized in 2009 and integrated through various health sector programs. Since 2021, the Community Clinic Health Support Trust manages operations under the 2018 Act.

The program operates as a public-private partnership where communities contribute land and participate in management while government provides infrastructure, staffing, and medicine supply. Each clinic serves a defined catchment area with Community Health Care Providers (CHCPs) after completing 3-months training at first joining and supported by Health Assistants and Family Welfare Assistants twice weekly.

Community ownership is institutionalized through Community Groups of 13-17 members (minimum 4 female) headed by Union Parishad members, ensuring local leadership and accountability.

Strategic Objectives

Universal Primary Health Care Access:

- Improve rural community health status by providing quality primary health, family planning, and nutritional services with emphasis on poor, vulnerable, and disadvantaged populations
- Ensure equitable geographic access to essential health services through strategic clinic placement reaching underserved areas
- Deliver integrated maternal and child health services including antenatal care, postnatal care, and normal delivery services

Health System Strengthening:

- Strengthen referral systems connecting community clinics with higher-level facilities for comprehensive care continuity
- Build sustainable community engagement mechanisms ensuring local ownership, participation, and accountability
- Enhance digital health systems through DHIS2 integration supporting real-time monitoring and evidence-based program management

Current Status and Trends

Infrastructure and Service Coverage Performance

Bangladesh operates 14,364 functional community clinics (95.8% of 15,000 target) with 14,167 trained CHCPs providing services at 1.5 km average distance from communities. Service coverage shows strong maternal health performance with 77.53% ANC 4+ visits and 94.01% skilled birth attendance, though postnatal care coverage declines across visits (6.88% first visit, 25.46% second visit, 52.89% third visit).

Table 4.8.1. Key CBHC Performance Indicators 2024

Indicator	Achievement	Target/Benchmark	Status
Functional Community Clinics	14,364	15,000	95.8%
ANC 4+ Coverage	77.53%	80%	Approaching
Skilled Birth Attendance	94.01%	90%	Achieved
PNC 1st Visit Coverage	6.88%	50%	Needs improvement
Outpatient Visits	100,203,957	-	High utilization
NCD Referrals (Hypertension)	620,072	-	Strong screening
NCD Referrals (Diabetes)	477,773	-	Strong screening

Population Health and Service Utilization

Community clinics recorded over 100 million outpatient visits with substantial NCD screening impact through 620,072 hypertension and 477,773 diabetes referrals. CHCPs conducted 17,754 normal deliveries while maintaining uninterrupted supply of 22 essential medicines. However, nutritional surveillance reveals significant malnutrition burden with 363,972 stunted, 422,853 wasted, and 275,795 underweight children requiring strengthened intervention programs.

Program Implementation Highlights

Primary Health Service Delivery Expansion

- Integrated Service Package: Delivered maternal and child health services through 14,364 clinics with CHCPs providing ANC, PNC, normal deliveries (17,754 conducted), IMCI protocols, reproductive health counseling, and family planning services including contraceptive supply
- NCD Screening and Referral: Conducted comprehensive screening for hypertension (620,072 referrals) and diabetes (477,773 referrals) with systematic upward referral and follow-up care coordination for diagnosed cases
- Essential Medicine Supply: Maintained uninterrupted supply of 22 essential drugs through systematic distribution of 10 cartons per clinic annually with quality assurance and inventory management systems

Digital Health Integration and Community Engagement

- DHIS2 Implementation: Equipped all clinics with laptops and internet connectivity enabling real-time reporting, performance monitoring, and evidence-based program management through standardized digital platforms
- Community Ownership: Established Community Groups with 13-17 members per clinic ensuring local participation, with Union Parishad leadership providing governance oversight and resource mobilization support

- Capacity Building: Trained 14,167 CHCPs through 3-month programs including 6-week hands-on experience, with ongoing refresher training and supportive supervision from HA and FWA staff

Recommendations

Policy Recommendations

- Sustainable Financing: Ensure sustained government funding for CBHC operations and expansion to achieve 15,000 clinic target through dedicated budget allocations and performance-based financing
- CHCP Institutionalization: Develop formal career pathways for CHCPs including standardized certification, salary scales, and integration into government health cadre structure
- Health System Integration: Strengthen community clinic integration within broader health system through formal referral protocols and coordinated service delivery

Operational Improvements

- Postnatal Care Enhancement: Strengthen PNC follow-up systems to improve coverage from 6.88% first visit to above 80% through community outreach and appointment systems
- CHCP Capacity Expansion: Enhance CHCP capabilities in minor ailment management and NCD follow-up through additional training and clinical protocols
- Digital System Optimization: Continue DHIS2 improvements and expand digital health capabilities for better monitoring and service delivery and upgrade the current system to make it compatible with SHR.

Resource and Capacity Requirements

- Infrastructure Completion: Complete remaining 636 clinics to achieve 15,000 target through systematic planning and resource allocation
- Training Scale-up: Expand CHCP training capacity through additional institutions and standardized curricula ensuring adequate skilled workforce
- Community Engagement: Increase female representation in Community Groups and strengthen community awareness campaigns promoting clinic services

Technical Notes

Data Sources

- District Health Information System 2 (DHIS2): Real-time service delivery data from all 14,364 community clinics including maternal health services, child health indicators, NCD screening results, and outpatient visit statistics
- Community Based Health Care Reports: Administrative data on clinic operations, staffing, medicine supply, infrastructure status, and community engagement activities
- CBHC Monitoring and Evaluation System: Routine program monitoring data including service utilization patterns, health outcomes, and performance indicators collected through supervisory visits
- Community Group Records: Community engagement data including membership composition, meeting records, decision-making processes, and community feedback on clinic operations
- Training and Capacity Building Records: CHCP training completion data, competency assessments, refresher training participation, and continuing education activities

Limitations and Methodological Considerations

- Self-reported Data: Community clinic data primarily self-reported by CHCPs may be

subject to reporting bias, under-reporting, or over-reporting.

- Digital Connectivity: Internet connectivity challenges in remote areas may affect real-time data transmission and DHIS2 reporting completeness
- Capacity Variations: Varying CHCP training levels, experience, and supervision quality may affect data collection consistency and service delivery standards
- Community Engagement: Different levels of community participation and engagement may influence service utilization patterns and health outcome achievements
- External Factors: Seasonal variations, economic conditions, and external health threats may impact service delivery and health outcomes independent of program interventions

7. References

National Policy and Strategic Documents

1. Community Clinic Health Support Trust Act 2018
2. Fourth Health, Population and Nutrition Sector Program (4th HPNSP) 2017-2022
3. National Health Policy 2011 and subsequent amendments

Health Interventions for FDMNs

Executive Summary

Bangladesh generously hosts 1005520 Forcibly Displaced Myanmar Nationals (FDMN) up to December 2024. Fifty-two percent of this population are children. There are 204278 families hosted in 33 highly congested camps located at Ukhiya and Teknaf upazila of Coxsbazar. Most of the people are living in camps stretching from Kutupalong and Balukhali settlements (82%) and further southwards in the Teknaf areas (18%). These camps are overcrowded with each person occupying on average 18.76 sqm, far from the recommended 30sqm/person. Similarly, the crisis has impacted health systems at many levels.

The health response, coordinated by the World Health Organization (WHO) and the Ministry of Health and Family Welfare, provides access to the Minimum Package of Essential Health Services (MPEHS). Among the partners of the health sector, 56 organizations as active and 15 as appealing partners through a network of primary healthcare facilities and secondary care facilities providing essential curative and preventive health care to FDMN and the host community.

A Health Emergency Operation Centre (HEOC) was established in the Civil Surgeon's Office, Cox's Bazar, in 2020 under the WHO-supported Health and Gender Support Operational Plan funded by the World Bank. The HEOC continues to operate with WHO funding under the direct supervision of the Civil Surgeon, even after the project's closure. It coordinates emergency preparedness and response for natural and man-made disasters, particularly those affecting the FDMN camps.

A unique health card was piloted in various camps in 2023 and distributed in all camps in 2024 for implementation. Unique health cards are minimizing medicine shopping behaviours and rationalizing the use of resources. Now this card works both as an identification tool and a record of health-seeking behaviour.

The collaborative efforts between the government, private sectors, civil society, and international development agencies have resulted in the establishment of static health centres in and around the camps. Ongoing rationalization processes aim to optimize the number of health facilities based on the identified needs. Global decline in the humanitarian fund affected the health sector in the FDMN health system, though a coordinated approach made the suffering lower.

Background and Strategic Objectives

Background

Bangladesh, a peaceful nation in South-East Asia, shares its south-eastern border with Myanmar. In August 2017, Myanmar's government forcibly displaced a large number of its nationals—recognized internationally as the Rohingya population—across the border into Bangladesh. This unprecedented influx created the world's largest refugee settlement in Cox's Bazar. The displaced population, deprived of healthcare in their homeland, arrived in poor health conditions, straining existing health services and posing health risks to host communities.

In response, the Government of Bangladesh, together with UN agencies, INGOs, NGOs, and private partners, took immediate action to stabilize the situation. The Refugee Relief and Repatriation Commissioner (RRRC), under the Ministry of Disaster Management and Relief (MoDMR), oversees refugee management across 33 camps. The Inter-Sector Coordination Group (ISCG) ensures coordination with the RRRC, Deputy Commissioner, and government bodies, supported by the Refugee Operations and Coordination Team (ROCT) comprising UN and INGO partners.

Health and Nutrition are among the eight key sectors of the humanitarian response. The Health Sector, led by WHO and co-led by the Ministry of Health and Family Welfare (MOHFW), and the Nutrition Sector, led by UNICEF, provide free healthcare to both Rohingya and host populations. Services include emergency care, reproductive and child health, mental health, non-communicable disease management, and communicable disease prevention through vaccination and outbreak control.

The MPEHS is delivered through health posts, primary health centres, and field hospitals managed by sector partners. In host areas, community clinics, union subcenters, and Upazila Health Complexes receive support under the Health Sector Strategic Plan 2023–2024.

Through coordinated humanitarian action, Bangladesh has significantly improved the health and nutrition status of the FDMN population, as well as the host communities, demonstrating strong leadership and resilience.

Strategic Objectives

For a sustainable and resilient health system, a strategic action plan for the year 2023-24 was carried out with the following objectives:

1. To strengthen the Health Systems' capacity to deliver quality health care effectively and efficiently in a sustainable manner. The sector will ensure a robust health system by providing strong leadership, governance, and coordination as core inputs to harness the full potential of all organizations, and resources (staff, financing, medical supplies) to deliver individual and public health interventions that improve health outcomes. It will strengthen monitoring systems to provide evidence for decision-making on disaster risk reduction through emergency preparedness.

2. To ensure equitable access to quality essential health care (preventive, curative, rehabilitative, and palliative health care) sustainably at all levels (community, primary, secondary, and tertiary health care levels).

Current Status and Trends

Infrastructure

About 15 Government health facilities directly serving FDMN population along with Bangladeshi community, which includes Community Clinics, Union health sub centers and Family Welfare Centers situated near FDMN camps. These are:

Table 4.9.1. Availability of Government facilities for FDMN:

Sl No.	Name of the facility	No. of beds	Role
01	Sadar Hospital Coxsbazar	250	Tertiary Hospital & also as a referral centre
02	Upazilla Health Complex, Ukhiya	51	Secondary Health Facility & also as a referral centre
03	Upazilla Health Complex, Teknaf	51	Secondary Health Facility & also as a referral centre
04	Union Sub Centers: i. Balukhali USC, Palongkhali, Ukhiya ii. Hnila USC, Teknaf		Considered as a Primary health Care Center

Table 4.9.1. contd.

Table continued...			
Sl No.	**Name of the facility**	**No. of beds**	**Role**
05	Health & Family welfare Centre: i. Rotnapalong UH&FWC, Ukhiya ii. Panongkhali UH&FWC, Ukhiya iii. Jaliyapalong UH&FWC, Ukhiya iv. Whykong UH&FWC, Teknaf v. Subrang UH&FWC, Teknaf vi. Baharchara UH&FWC, Teknaf		Considered as a Primary health Care Center
06	Community Clinic: i. Kutupalong CC, Rajapalong, Ukhiya ii. Nolboniya, CC, Palongkhali, Ukhiya iii. Alhaj Nurul Haque CC, Palongkhali, CC, Ukhiya iv. Ali akbar para-CC, Teknaf v. Danga Cata CC, Teknaf vi. Koyaichchai CC, Teknaf		Considered as health Post

A total of 152 health and nutrition facilities of 5 categories run by different development partners are currently working in FDMN camps, including health posts, Primary health care centres, Secondary health care centres or field hospitals with or without CEmONC facility. There are 46 fixed sites and 78 outreach centres for EPI. The field hospitals are Bangladesh Red Crescent Society (BDRCS) field hospital (beds), Médecins Sans Frontières – Operational Centre Paris (MSF OCP) (Goyalmara), Médecins Sans Frontières (MSF) Kutupalong Field Hospital, Hope Field Hospital and Turkish Field Hospital. There are 478 beds for indoor patient management, out of which 288 beds are at the field hospital and the remaining 190 beds are at primary health care centres.

Table 4.9.2. Availability of non-government health sector facilities in the camps

Sl no.	**Facilities**	**Number (operational)**
1.	Health Post	54
2.	Primary Health Centre	46
3.	Integrated Nutrition facilities	45
4.	Field Hospital	5
5.	Secondary Health Facility (including surgical & non-surgical)	2

Table 4.9.3. Inpatient bed distribution of field and secondary hospital

Sl no.	Name & type of the hospital/ facility	Address with location	Number of inpatient beds	Total human resources (Jan-Dec, 2024)	Total patient served (Jan-Dec, 2024)	Total no of services provided (Jan-Dec, 2024)	Implementing organization
01	Friendship Hospital Ukhiya (FHU)	Balukhali Panbazar, Ukhiya.	45 (40 general + 5 scanu beds	69	74129	241891	Friendship international
02	HOPE Field Hospital for Women	Camp 4 , Ukhiya	85 (50 general beds +35 maternity)	130	25014	61,825	HOPE Foundation
03	IFRC/BDRCS Field Hospital	Rubber Garden, Camp 7, Ukhiya	30	45	50324	80327	BDRCS
04	Goyalmara Mother and Child Hospital, Secondary type	Goyalmara, Palongkhali, Ukhiya	86	353	7779		MSF-Holland
05	Turkish Field Hospital	Camp 09, Balukhali, Ukhiya, Coxsbazar	46	296	137360	139	AFAD
06	MSF OCA Hospital on Hill (HoH) Secondary Health Facility		51	318	4596		MSF-Holland
07	Kutupalong MSF OCA Secondary Health Facility	Kutulalong, Ukhiya	113	555	10132		MSF-Holland
09	Ukhiya Specialized Hospital	Rajapalong, Ukhiya	58	Handed over to RRRC			
10	BDRCS Hospital Balukhali	Balukhali, Ukhiya	31	Handed over to UH&FPO, Ukhiya			

The other facilities are:

- Sever Acute Respiratory Isolation & Treatment Centres (SARI-ITC)
- Stand-alone MHPSS Centres
- Covid-19 Sentinel Site: 14
- AWD Sentinel Site: 35
- Diarrhea Treatment Centers (DTC): 03
- Specialized Eye, ENT Centers-24
- Physiotherapy and Rehabilitation Center- 21
- HIV Testing Centre (HTC): 4
- OCC Centre: 02

There is one private hospital enlisted as a referral centre named Fuad Al Khateeb Hospital.

Service Providers

- Total Doctors: 403
- Total Nurses: 302
- Toal Paramedics: 221
- Total Midwives: 397
- Total Community Health Workers (CHW): 1450

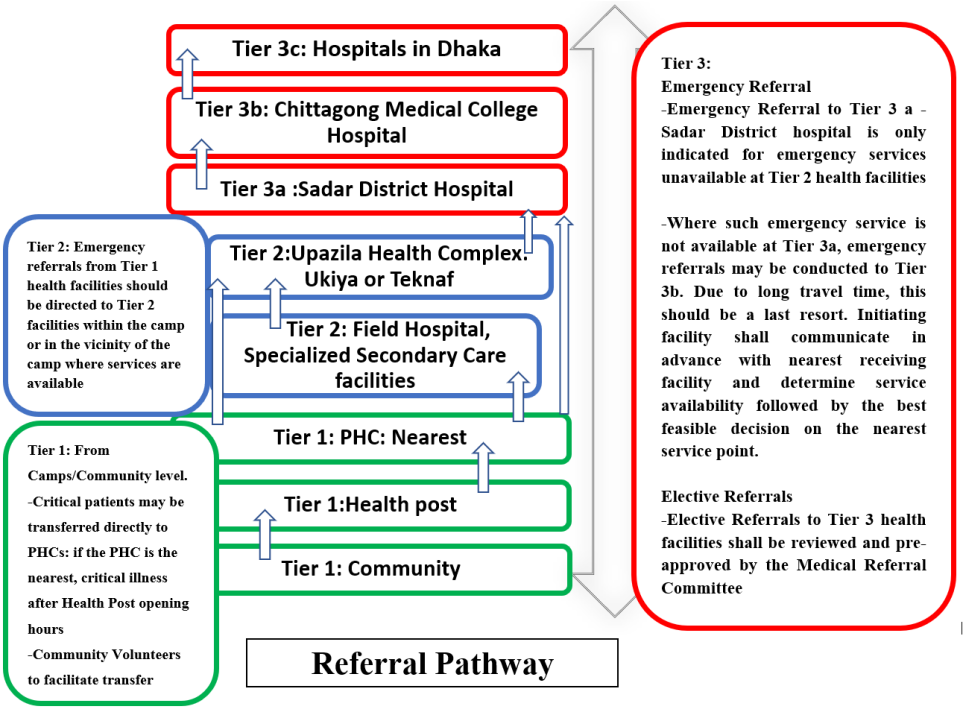

Figure 4.9.1. Referral pathway across the health service delivery points

Information Systems

- All facilities are equipped with laptops/ smartphones with internet connection.
- Data is reported via DHIS2, EWARS, Health Sector Cox's bazar 4W data & information Hub Dashboard, FP reports, HeRAMs (Health Resources & Services Availability Monitoring System)

Key Indicators

Major Services Provided

The list of major services provided in the camps is mentioned in the annex.

Table 4.9.4. Number of services provided to FDMNs in 2024

Month	Total under 5 service-Female	Total under 5 service-Male	Total over 5 service-Female	Total over 5 service-Male	Total
Jan-24	55,736	63,416	247,670	88,783	455,605
Feb-24	52,102	59,228	227,633	80,659	419,622
Mar-24	55,103	88,437	221,936	84,044	449,520
Apr-24	47,149	54,220	194,512	77,854	373,735
May-24	50,640	55,063	222,381	82,603	410,687
Jun-24	48,962	54,682	214,910	83,737	402,291
Jul-24	51,353	56,949	221,077	89,960	419,339
Aug-24	75,119	83,534	238,268	97,968	494,889
Sep-24	58,573	64,975	237,419	95,404	456,371
Oct-24	57,688	63,661	252,931	103,566	477,846
Nov-24	56,022	62,420	249,087	98,617	466,146
Dec-24	52,117	57,802	245,514	91,407	446,840
Total	660,564	764,387	2,773,338	1,074,602	5,272,891

In 2024, a total of 5.27 million outpatient services were provided across all facilities, with under-five children accounting for 27% of total visits. Service utilization was consistently higher among females under five and males over five. A notable surge occurred in August 2024, reflecting increased seasonal disease burden and health-seeking behavior during the monsoon period. Overall, service delivery remained steady throughout the year, demonstrating strong continuity of primary healthcare services.

Table 4.9.5. EPI service delivery in 2024

Target/Service	January	February	March	April	May	June	July	August	September	October	November	December	Total
EPI Infant Monthly Target	2,966	2,966	2,966	2,966	2,966	2,966	2,966	2,966	2,966	2,966	2,966	2,966	35,592
BCG given (0-11m)	2,792	2,825	2,825	2,713	2,126	2,663	2,747	2,735	3,173	3,224	2,194	3,797	33,814
Penta 1 given (0-11m)	2,825	2,744	4,043	3,559	2,661	2,674	2,485	2,628	2,896	3,117	3,044	3,213	35,889
Penta 2 given (0-11m)	1,754	1,370	4,467	3,885	3,422	3,139	2,632	2,431	2,693	2,786	2,820	2,985	34,384
Penta 3 given 0-11m	1,386	978	2,489	4,029	3,477	3,692	2,997	2,552	2,721	2,591	2,498	2,838	32,248
PCV1 given 0-11m	3,468	2,256	5,030	4,080	2,363	3,098	2,404	2,754	2,319	2,585	1,357	4,577	36,291
PCV2 given 0-11m	2,445	1,151	4,849	4,702	3,389	3,554	2,720	2,623	2,248	2,125	1,301	3,006	34,113
PCV3 given 0-11m	937	560	2,814	4,416	3,424	4,153	3,039	2,825	2,342	1,912	1,113	2,608	30,143
OPV 0 given (0-11m)	1,499	1,564	1,414	1,227	1,166	1,467	1,612	1,569	1,168	1,172	1,379	2,128	17,365
OPV 1 given (0-11)	3,046	3,053	3,383	3,295	2,682	2,615	2,476	2,661	1,772	2,674	3,356	3,673	34,686
OPV 2 given (0-11m)	2,112	2,016	3,576	3,512	3,248	2,937	2,555	2,348	1,525	1,977	2,718	3,526	32,050
OPV 3 given (0-11m)	1,890	1,646	2,341	3,707	3,302	3,489	2,810	2,458	1,583	1,598	2,175	2,793	29,792
fIPV1 given (0-11m)	4,048	2,676	4,961	3,644	3,046	2,870	2,577	2,625	2,945	2,661	1,903	4,146	38,102
fIPV2 given (0-11m)	1,661	1,084	2,320	4,075	3,864	3,923	3,154	2,650	2,835	2,018	1,488	5,018	34,090
MR given 0-11m	1,778	1,522	1,836	3,350	3,560	5,532	3,347	3,223	4,138	3,875	4,190	3,071	39,422
BCG given (12-23m)	42	43	27	42	36	31	482	36	40	58	46	78	961
Penta 1 given (12-23m)	58	28	42	85	50	57	48	38	80	103	96	91	776
Penta 2 given (12-23m)	69	76	106	158	151	221	204	116	160	222	140	168	1,791

Table 4.9.5. contd.

Table continued...

Target/Service	January	February	March	April	May	June	July	August	September	October	November	December	Total
Penta 3 given 12-23m	152	192	211	379	422	555	526	428	565	521	407	351	4,709
PCV1 given 12-23m	58	22	48	81	49	69	48	61	29	107	39	166	777
PCV2 given 12-23m	112	78	152	236	178	303	203	199		214	72	238	1,985
PCV3 given 12-23m	220	158	367	476	510	704	597	636		441	203	656	4,968
OPV 1 given (12-23m)	67	23	26	62	45	42	35	44	35	81	88	104	652
OPV 2 given (12-23m)	125	76	73	115	110	170	118	101	52	109	137	157	1,343
OPV 3 given (12-23m)	316	218	170	282	339	432	381	353	221	271	315	312	3,610
OPV 4 given (12-23m)				84									84
fIPV1 given (12-23m)	91	24	64	411	59	80	61	61	98	105	63	155	1,272
fIPV2 given (12-23m)	251	234	299	940	476	620	529	500	601	392	219	437	5,498
MR given 15-18m	1,791	1,532	1,820	2,915	2,800	3,852	3,051	2,769	3,683	3,325	3,144	3,196	33,878
Fully Immunized Child	1,365	1,522	1,516	2,412	3,560	3,024	2,593	2,541	3,135	2,845	3,061	3,063	30,637
EPI Session Planned	220	210	239	2,323	2,323	2,327	2,326	2,320	2,344	2,342	2,331	2,342	21,647
EPI Session Held	220	210	239	2,323	2,323	2,327	2,326	2,255	2,344	2,342	2,331	2,342	21,582
TD1 dose pregnant women	2,447	2,644	2,371	3,337	2,895	2,852	3,211	3,305	2,963	2,596	2,510	2,578	33,709
TD2 dose pregnant women	1,864	1,926	2,107	2,142	2,356	2,549	2,421	2,587	2,747	2,541	1,798	2,040	27,078

In 2024, immunization performance remained strong, with most vaccine coverage aligning closely with monthly targets. BCG, Penta, PCV, OPV, and MR vaccines all showed steady uptake across months, achieving nearly full-year targets. The fully immunized child count reached 30,637, reflecting consistent field performance. EPI sessions were well-implemented — 21,582 held out of 21,647 planned (≈100%), demonstrating high operational efficiency. Immunization for pregnant women (TT1 and TT2) also remained robust, with over 60,000 doses administered in total. Minor monthly fluctuations likely reflect campaign timing and reporting cycles, but overall, the program maintained strong coverage and reliability throughout 2024.

Table 4.9.6. Key health service and mortality indicators among FDMN population in Cox's Bazar, 2024

Key Indicators	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total/ AVG
OPD Consultation	416700	435100	413800	360300	417200	389500	372600	470600	440900	468000	417700	439300	5041700
Inpatient Admission	8945	9427	9020	8499	9075	8848	8913	11000	10000	11000	9081	14000	117808
Total Birth at facilities	3254	2985	3107	2881	2934	2570	2741	2878	2987	3229	2957	3327	35850
Facility based delivey rate (FDMN)	86%	86%	84%	87%	86%	89%	88%	88%	87%	87%	90%	92%	88%
Crude Mortality Rate (per 1000 population)	0.31	0.24	0.2	0.17	0.18	0.16	0.15	0.22	0.22	0.22	0.21	0.18	2.46
No. of maternal deaths reported in camps	7	5	4	1	4	5	3	5	2	4	3	3	46
Maternal Mortality rate (per 100000 live births)	300	230	173	53	189	241	137	218	81	152	128	116	168.1667
Infant Mortality Rate (per 1000 live birth)	30	21.13	20.35	15.76	12.72	12.54	16.48	18.34	19.45	20.14	19.23	12.33	18.3
Under 5 mortality (per 100 live birth)	34.29	24.8	21.65	18.91	17.44	15.43	17.85	22.27	25.12	22.8	22.65	13.49	21.47
Clinical Mental Health	2039	1692	1129	921	1006	1017	958	1093	841	1076	891	1180	13843
First time users of FP	12000	11000	11000	8518	12000	9901	11000	11000	11000	12000	11000	12000	132419
Major Surgeries	467	374	382	715	494	353	350	444	638	563	531	708	6019
Minor Surgeries	5262	4976	5338	5019	6077	6316	5392	6028	7047	7973	4267	6754	70449

In 2024, over 5 million OPD consultations and 118,000 inpatient admissions were recorded across FDMN camps, reflecting strong service utilization. Facility-based deliveries remained high at 88%, while the maternal mortality rate averaged 168 per 100,000 live births, showing gradual improvement from early-year peaks. Infant and under-five mortality rates stabilized at 18 and 21 per 1,000 live births, respectively. The crude mortality rate was 2.46 per 1,000 population, indicating sustained health sector performance. More than 13,800 individuals received clinical mental health services, and 132,000 first-time family planning users were recorded, highlighting ongoing expansion of reproductive and psychosocial care.

Interpretation of Key Findings

In 2024, health service delivery and outcomes showed marked improvement across all indicators. Outpatient consultations surpassed 5.27 million, and inpatient admissions reached 118,000, reflecting strong utilization and service continuity. Immunization coverage remained high, with nearly full achievement of annual EPI targets and over 30,000 fully immunized children, while maternal and child health indicators improved through expanded ANC and delivery services.

The maternal mortality rate declined to 168 per 100,000 live births, and infant and under-five mortality rates stabilized at 18 and 21 per 1,000 live births, respectively. Facility-based deliveries remained high at 88%, and C-section rates (8.2%) stayed within acceptable limits.

Acute respiratory infections and skin diseases were the top causes of morbidity, followed by gastrointestinal and diarrhoeal illnesses. A major dengue outbreak occurred between August and October, with over 30,000 cases (confirmed and suspected). Overall, health outcomes improved significantly, reflecting enhanced access, resilience, and coordination of the health sector in both Rohingya and host communities.

Recommendations

Policy Recommendations

- Ensure sustained government and donor funding.
- Non-government hospitals providing clinical services operated by INGOs and NGOs should be registered under DGHS.

Operational Improvements

- Reassessment of health service demand for FDMN
- Implementation of the Inclusive Services and Opportunities (ISO) project as soon as possible
- Medical waste management

Resource & Capacity Needs

- Additional manpower for coordination at the civil surgeon's office
- Transport facility for routine monitoring and supervision from the district.

Technical Notes

Data Sources

- District Health Information System (DHIS2)
- UNCHR reports
- Monthly bulletin for FDMNs
- Survey on health service delivery in FDMN health camps

Collection Methods

- Routine facility-based data entry
- Monthly and quarterly performance reports

Frequency of Updates

- Monthly (routine)
- Annual (summarized reporting)

Quality Assurance

- On-site supervision
- Periodic data audits
- Dashboard validation checks

References

- Refugee Relief and Repatriation Commissioner (RRRC) documents
- United Nations High Commissioner for Refugees (UNHCR) surveys
- DHIS2, FDMN server

Curative Care Services

Executive Summary

In 2024, Bangladesh's curative healthcare system demonstrated significant progress in service coverage, utilization, and efficiency across all levels of care. The Directorate General of Health Services (DGHS) operated a total of 16,394 primary-level facilities, including community clinics, and 269 secondary and tertiary hospitals, together offering over 71,000 sanctioned beds nationwide.

As of June 2024, the number of private hospitals, clinics, diagnostic centers, and blood banks is 8667. The number of beds in licensed private hospitals is 92,601.

Service utilization across public hospitals continued to rise. Upazila Health Complexes accounted for the largest service volume with 47 million outpatient visits, while district and medical college hospitals also experienced substantial increases in admissions and emergency cases. The average bed occupancy ratio (BOR) exceeded 100% in most secondary and tertiary hospitals, indicating high demand and efficient bed use, though highlighting the need for capacity expansion.

Specialized and medical college hospitals provided advanced clinical and surgical care, with facilities such as NICVD, NINS, and NITOR managing the highest caseloads. The average length of stay (ALS) remained stable 3–4 days in secondary facilities and 8–14 days in tertiary hospitals. Minor variations in trend charts for 2024 reflect the reclassification of hospital categories, not changes in actual service performance.

Outpatient, emergency, and inpatient attendance was higher among female patients and individuals over five years of age, while under-five children continued to represent a significant share of visits, underscoring the ongoing focus on maternal and child health.

Overall, the curative care network maintained strong service delivery and utilization trends, reflecting the resilience and responsiveness of Bangladesh's health system in addressing growing healthcare demands and advancing toward universal health coverage.

Background and Strategic Objectives

Background

Bangladesh's curative healthcare system functions as a multi-tiered network delivering essential, specialized, and advanced medical services through an extensive range of public hospitals and primary care facilities. The Directorate General of Health Services (DGHS) oversees this system, encompassing community clinics, union-level facilities, upazila health complexes, district hospitals, medical college hospitals, and national specialized institutes.

Over the years, the curative care sector has undergone significant expansion in infrastructure, workforce, and service provision, ensuring greater access to emergency, surgical, and referral care. In 2024, category reclassification and digital reporting enhancements under the DHIS2 platform further strengthened monitoring and performance tracking. The network's responsiveness during health crises, including infectious disease outbreaks and mass emergencies, reflects its growing resilience and operational maturity.

Despite resource limitations and uneven distribution of tertiary facilities, the curative care system continues to play a critical role in achieving Universal Health Coverage (UHC) and advancing the goals of the Health, Population, and Nutrition Sector Program (HPNSP).

Strategic Objectives

1. Ensure universal access to quality curative services across all administrative levels through improved infrastructure, logistics, and skilled workforce deployment.

2. Enhance service efficiency by optimizing bed utilization, reducing overcrowding, and strengthening referral systems between primary, secondary, and tertiary care.
3. Expand specialized and tertiary care capacity, particularly outside Dhaka, to ensure equitable access to advanced diagnostics and treatment.
4. Institutionalize quality assurance mechanisms, including clinical audits, patient safety practices, and hospital performance monitoring using digital health systems.
5. Strengthen emergency preparedness and critical care services to manage public health emergencies, trauma, and non-communicable disease complications effectively.
6. Promote integrated data systems and hospital information management to improve real-time decision-making and resource allocation.
7. Foster public–private collaboration to complement government services and enhance accessibility to essential curative care for all population segments.

Current Status and Trends

In 2024, Bangladesh's curative health services entered a period of consolidation and capacity transition. Service utilization remained stable at historically high levels across all tiers, while infrastructure development progressed through the construction and operationalization of several new medical college hospitals. These facilities, still at various stages of completion, are expected to substantially expand tertiary-level capacity once fully functional.

The overall trend shows a gradual shift from routine outpatient load to more specialized and referral-based services, driven by rising demand for surgical, emergency, and critical care. The bed occupancy ratio remained above 100 % in many large hospitals, reflecting both efficient use and persistent congestion.

At the same time, category reclassification and enhanced DHIS2-based digital reporting refined hospital performance tracking, improving accuracy but affecting year-to-year trend comparability. Collectively, these developments mark a transitional phase for the curative system—balancing high service demand with the parallel expansion of infrastructure and advanced care capacity.

Program Implementation Highlights

In 2024, Bangladesh's curative service program focused on strengthening secondary and tertiary hospital capacity while sustaining broad primary-level service coverage. DGHS operated 269 hospitals with over 50,000 functional beds, including major expansions at district and medical college levels. Several new medical college hospitals remained under construction, signaling a strategic shift toward enhanced tertiary care access.

As of June 2024, the number of private hospitals, clinics, diagnostic centers, and blood banks is 8667. The number of licensed private hospitals and clinics is 2,909, number of private diagnostic centers is 5,538, and number of blood banks is 220. The total number of beds in these registered private hospitals and clinics is 92,601.

Across 16,000+ primary-level facilities, outpatient and emergency visits exceeded 47 million and 9 million, respectively, confirming robust community-level access. Secondary hospitals handled more than 10 million OPD contacts and 2 million inpatient admissions, with average BOR above 100%, reflecting efficient utilization despite infrastructure constraints.

The program also expanded surgical capacity, performing over 770,000 major and 650,000 minor surgeries, supported by improved theatre functionality and referral coordination between district and upazila levels. Enhanced DHIS2 reporting improved data quality, enabling better tracking of operational efficiency.

Overall, implementation efforts in 2024 emphasized service continuity, data modernization, and infrastructure growth — laying the foundation for a more resilient, digitally integrated hospital system.

Key Indicators

Table 5.1. Primary healthcare facilities run by DGHS, December 2024

Type of facility	Type of service	Total number of facilities	Total number of beds
Upazila health complex (100-bed)	Hospital	8	800
Upazila health complex (50-bed)	Hospital	359	17950
Upazila health complex (31-bed)	Hospital	54	1674
Upazila health complex (10-bed)	Hospital	11	110
Subtotal of upazila health complexes		432	20534
50-bed hospital	Hospital	2	100
31-bed hospital	Hospital	7	217
30-bed hospital	Hospital	3	90
25-bed hospital	Hospital	1	25
20-bed hospital	Hospital	40	800
10-bed hospital	Hospital	15	150
Upazila health office	OPD	60	0
Union sub-center	OPD	1312	0
Union health and family welfare center (UH&FWC)	OPD	87	0
Urban dispensary	OPD	35	0
School health clinic	OPD	23	0
Tejgaon health complex, Dhaka	OPD	1	0
Grand total of primary-level facilities (except community clinic)		2018	21916
Community clinic (functional at present)	OPD	14376	0
Grand total of primary-level facilities (including community clinic)		16394	21916

Primary-level service delivery in Bangladesh remained extensive, with 16,394 functional facilities (including community clinics). Together, they account for 21,916 beds, ensuring wide coverage at the grassroots. Community clinics alone represent nearly 88% of all primary facilities, underscoring their central role in universal health coverage.

Table 5.2. Secondary and tertiary healthcare institutions under DGHS, December 2024			
Type	**Level of facilities**	**No. of facilities**	**No. of functional beds**
Airport health office	Secondary	2	0
Chest disease clinic		42	0
Chest hospital		13	866
District-level office (Civil Surgeon's Office)		65	0
District-level hospital (250-Bed) (District/ General Hospital)		53	13250
District-level hospital (130-Bed) (District/ General Hospital)		1	130
District-level hospital (100-Bed) (District/ General Hospital)		5	500
Infectious disease hospital		5	180
Leprosy hospital		3	130
Port Health Office		2	0
Trauma center		9	170
Other hospitals		5	1000
Subtotal - Secondary Level Hospitals		205	16226
Division-level office (Divisional Health Office)	Tertiary	8	0
Dental College Hospital		1	200
Hospital of alternative medicine		2	200
Medical College Hospital		35	25550
Specialized Health Center		3	0
Specialized hospital		2	750
Speciality postgraduate institute and hospital		12	5920
Other hospitals		1	1200
Total tertiary-level facilities		**64**	**33820**
Total secondary and tertiary-level facilities		**269**	**50046**

DGHS managed 269 hospitals across secondary and tertiary tiers, with a combined capacity of 50,046 sanctioned beds. Tertiary hospitals accounted for two-thirds of these beds, reflecting growing specialization and advanced care expansion at divisional and metropolitan levels.

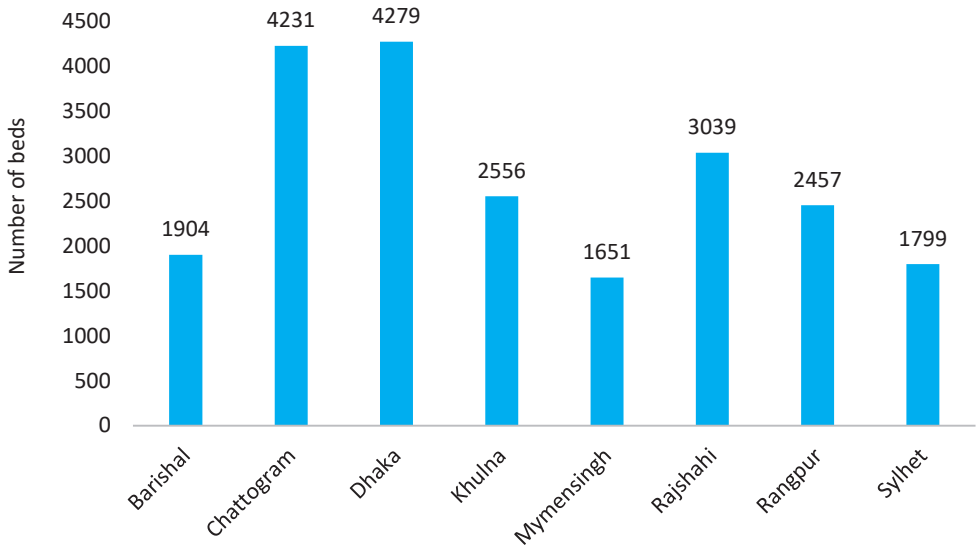

Figure 5.1. Number of beds in all primary care hospitals by administrative division, up to December 2024

Dhaka, Chattogram, and Rajshahi divisions host the largest share of primary-level hospital beds, mirroring population density and facility concentration. The distribution highlights ongoing efforts to balance primary-care capacity nationwide.

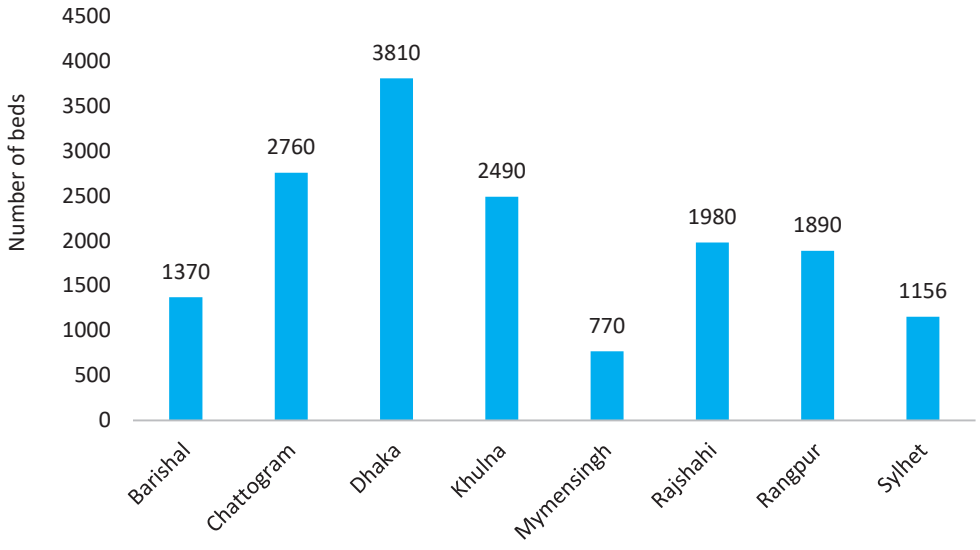

Figure 5.2. Number of beds in all secondary care hospitals by administrative division, up to December 2024

Secondary-level hospital beds are highest in Dhaka and Chattogram divisions. Newly upgraded district hospitals contributed to the observed increase in bed capacity in 2024.

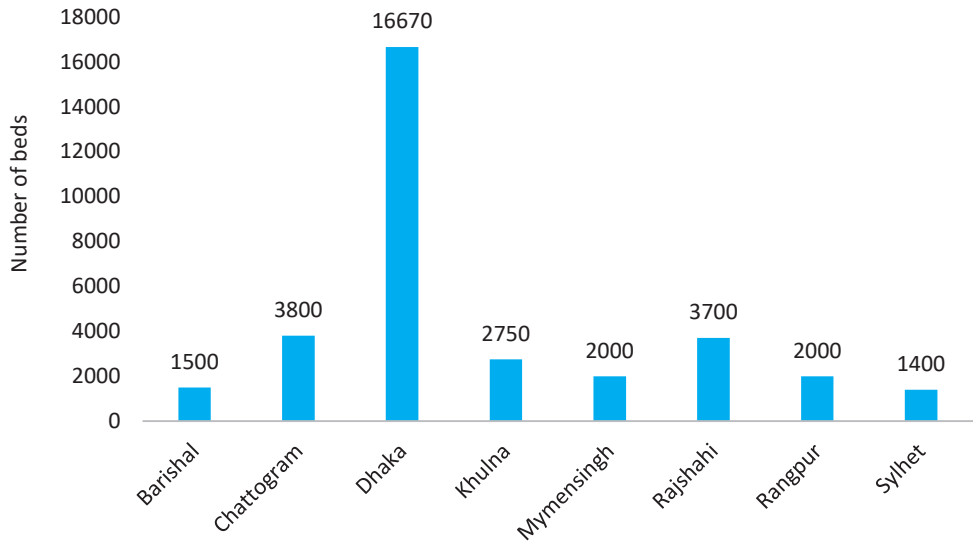

Figure 5.3. Number of beds in all tertiary-level hospitals by administrative division of Bangladesh, up to December 2024

Tertiary-care capacity remains concentrated in Dhaka Division, which houses most teaching and specialized hospitals. This reflects both centralization of advanced medical services and the need for decentralizing tertiary care in the future.

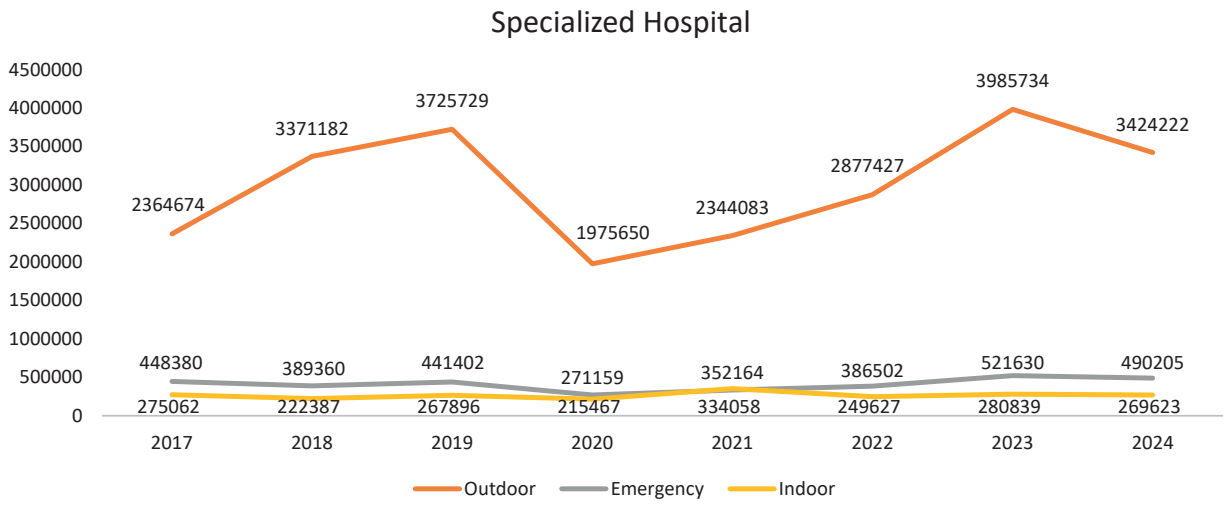

Figure 5.4. Last 8 years' service trends in government specialized hospitals (outdoor, emergency, and indoor)

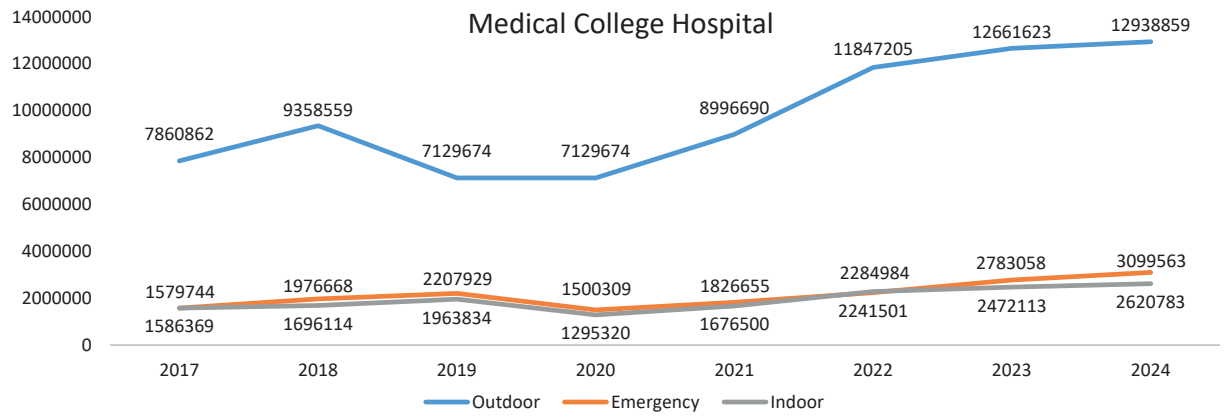

Figure 5.5. Last 8 years' service trends in government medical college hospitals

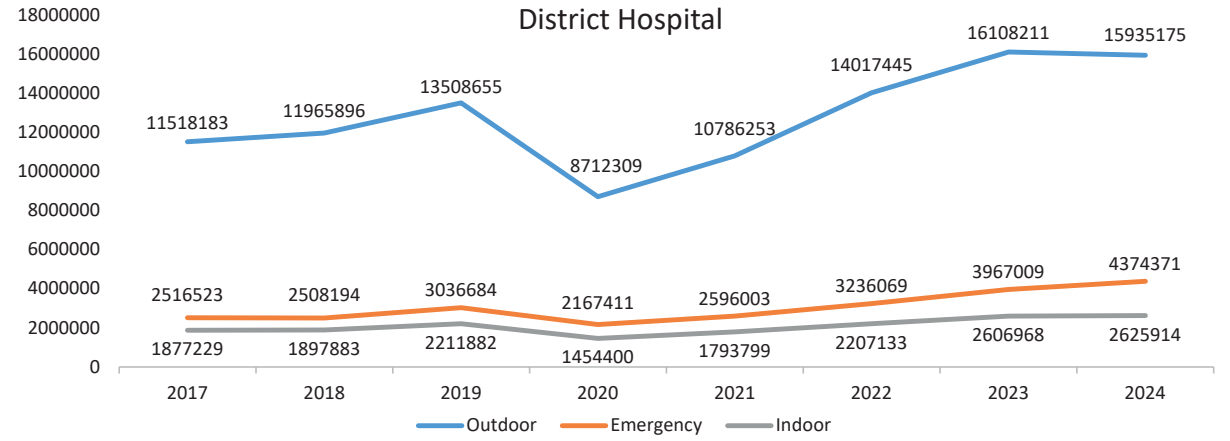

Figure 5.6. Last 8 years' service trends in government district hospitals

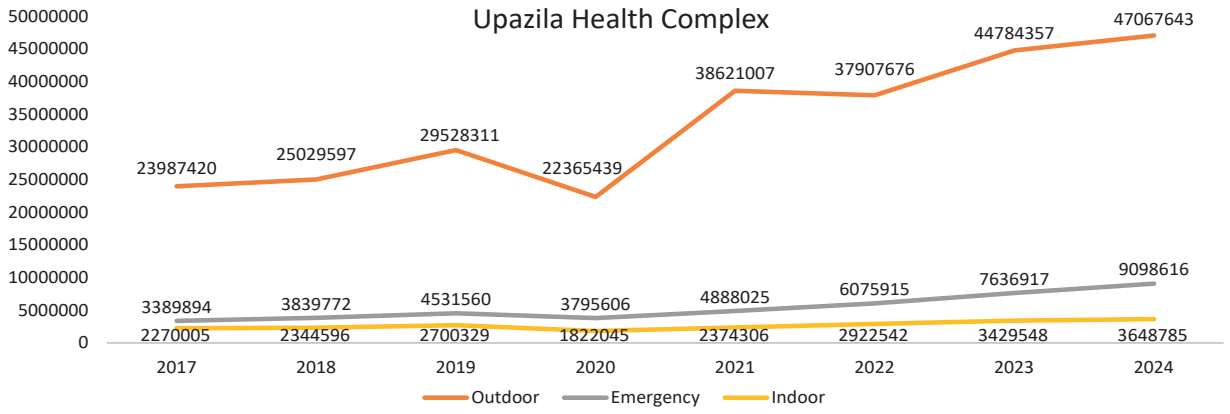

Figure 5.7. Last 8 years' service trends in government upazila health complexes

A steady upward trend in outpatient, emergency, and indoor services is evident over the last eight years. However, the 2024 data show minor deviations due to the reclassification of hospital categories, particularly for specialized and district hospitals. The variation reflects changes in reporting structure rather than service decline.

Table 5.3. Outpatient, emergency and indoor attendance and other statistics of government specialized hospitals, 2024

Name of the specialized hospital	OPD visit		Emergency Visit		Admission		ALS	BOR	No.of bed	Major surgery	Minor surgery
	Male	Female	Male	Female	Male	Female					
250-badded TB Hospital Shyamoli, Dhaka	55550	45028	746	404	2220	1415	14.16	62	250		
Bangladesh Institute of Tropical and Infectious Disease (Fouzderhat)	34410	47779	16580	13210	4266	4271	2.5	55	500		
Gopalganj Eye Hospital And Training Institute	64393	70062	2680	1331	4108	3779	3.4	74	100	7450	20234
Khulna Specialized Hospital	62063	80569	1554	1267	2939	1834	11.7	63	250	703	205
National Gastroliver Institute & Hospital	81133	68164	3506	2482	4420	3569	12.8	97	250	187	649
National Institute of Burn and Plastic Surgery, Dhaka	40053	45126	8099	8472	3473	3262	31.1	100	500	5693	5609
National Institute Of Cancer Research And Hospital (NICR&H)	122875	152465	6052	6001	7343	6509	11.3	91	500	2749	289
National Institute Of Cardiovascular Disease (NICVD)	125207	79136	111341	59238	71969	35449	4.6	107	1250	3481	14013
National Institute of Diseases of the Chest & Hospital (NIDCH)	96611	60699	12487	6381	11818	3945	13.0	84	870	866	1406

Table 5.3. contd.

Table continued...											
Name of the specialized hospital	OPD visit		Emergency visit		Admission		ALS	BOR	No.of bed	Major surgery	Minor surgery
	Male	Female	Male	Female	Male	Female					
National Institute of ENT	111376	87503	8056	5406	2260	1506	11.8	92	100	2170	10282
National Institute of Kidney Disease and Urology (NIKDU)	110646	73493	7253	4181	6458	3968	15.3	79	500	1653	2343
National Institute Of Mental Health (NIMH)	50907	38844	4449	4180	3429	2701	13.3	97	400		
National Institute of Neuro Sciences & Hospital (NINS & H)	310425	291376	56064	40759	11591	8129	8.3	100	500	4178	3094
National Institute Of Ophthalmology (NIO)	376981	295111	9153	3315	8676	8004	5.5	98	250	22505	1918
National Institute of Traumatology and Orthopaedic Rehabilitation (NITOR)	184842	114101	62360	23198	27405	6086	9.6	96	1000	34456	11638
Pabna Mental Hospital	23292	24002	0	0	2164	657	57.4	85	500		
Total	1850764	1573458	310380	179825	174539	95084	14.1	86	7720	86091	71680

Specialized hospitals served over 3.4 million outpatients and 485,000 emergency cases, with an average BOR of 86% and ALS 14 days. NICVD, NINS, and NITOR handled the highest surgical loads, emphasizing the growing demand for tertiary and critical care services.

Table 5.4. Outpatient, emergency and indoor attendance and other statistics of government medical college hospitals, 2024

Name of the medical college hospital	OPD visit		Emergency visit		Admission		ALS	BOR	No.of bed	Major surgery	Minor surgery
	Male	Female	Male	Female	Male	Female					
Chattogram Medical College Hospital	601907	577904	216399	173437	157663	129224	4.8	133	2200	38388	98665
Cumilla Medical College Hospital	221386	250721	52488	59492	51280	57963	3.9	221	500	27895	20291
Dhaka Medical College Hospital	553772	646047	288909	268923	98868	89732	8.5	147	2600	33998	74068
Dinajpur Medical College Hospital	147368	157123	38730	40146	38449	39992	3.9	169	500	5472	6068
Faridpur Medical College Hospital	182677	290950	4376	4852	44605	49399	3.7	184	1000	7482	13274
Gopalganj Medical College Hospital	84945	83497	11585	11117	9197	8895	2.3	64	500		
Khulna Medical College Hospital	184210	260734	3486	3330	58255	61670	5.2	266	500	5944	7359
Kushtia Medical College Hospital	24189	32784	0	0	0	0			500		
Manikganj Medical College Hospital	143841	163489	4966	3245	14089	17475	3.1	60	500	107	130
Mugda Medical College Hospital, Dhaka	342719	412829	29445	30163	25723	32236	4.8	157	500	9111	8131
Mymensingh Medical College Hospital	587628	551583	36844	34956	153114	168410	3.7	329	1000	20883	102574
Rajshahi Medical College Hospital	709208	741574	159608	169675	138729	149491	3.7	218	1200	22439	29137
Rangpur Medical College Hospital	285421	233590	79479	74841	81745	77170	4.6	199	1000	12249	50469

Table 5.4. contd.

Table continued...											
Name of the medical college hospital	**OPD visit**		**Emergency visit**		**Admission**		**ALS**	**BOR**	**No.of bed**	**Major surgery**	**Minor surgery**
	Male	**Female**	**Male**	**Female**	**Male**	**Female**					
Satkhira Medical College Hospital	65358	70291	729	447	15357	12754	4.7	123	500	288	190
Shaheed M Monsur Ali Medical College Hospital	77767	113440	16795	15906	16286	16647	4.4	83	500	2245	5237
Shaheed Suhrawardy Medical College Hospital	239542	176605	67535	71509	29826	36430	6.5	95	1350	12985	10974
Shaheed Taj Uddin Ahmad Medical College Hospital	290565	319175	82190	86816	40135	40938	3.2	131	500	2877	7650
Shaheed Ziaur Rahman Medical College Hospital, Bogra	240294	342816	64742	54754	65463	57901	4.5	308	500	11400	20267
Shahid Syed Nazrul Islam Medical College Hospital	128388	158450	41028	46107	32612	38066	3.2	121	500	3749	6731
Sher-e-bangla Medical College Hospital	256062	288555	100952	94923	93779	87626	3.6	190	1000	13467	21268
Sir Salimullah Medical College Hospital	321608	466383	169527	175571	34787	48127	4.6	113	900	13436	22038
Sylhet MAG Osmani Medical College Hospital	376426	437131	94109	94465	88553	90914	4.8	259	900	28128	39755
Tangail Medical College Hospital	49666	48241	9605	11361	9648	11560	3.4	43	500	123	144
Total	**6114947**	**6823912**	**1573527**	**1526036**	**1298163**	**1322620**	**4.3**	**164**	**19650**	**272666**	**544420**

Medical college hospitals delivered nearly 13 million outpatient consultations, 3.1 million emergency visits, and 2.6 million admissions, maintaining an average BOR of 164% indicating overstretched capacity and sustained high demand for advanced care.

Table 5.5. Outpatient, emergency and indoor attendance and other statistics of district sadar/general hospitals, 2024

Name of the district hospital	OPD visit		Emergency visit		Admission		ALS	BOR	No.of bed	Major surgery	Minor surgery
	Male	Female	Male	Female	Male	Female					
Bagerhat District Hospital	97339	144460	19600	19851	12774	14535	3.7	223	250	1573	12023
Bandarban 250 Bed District Hospital, Bandarban	33139	41922	11922	7991	4126	4628	3.6	79	250	309	3403
Barguna District Hospital	68653	111180	34300	33438	14712	19328	3.3	129	250	190	3275
Barisal General Hospital	40254	53833	7939	9294	5358	7144	3.6	113	100	387	2925
Bhola 250 bed District Sadar Hospital	125958	163861	44536	38862	35007	29993	1.9	142	250	491	1319
Bogra 250 bed Mohammad Ali District Hospital	178360	205888	31103	31577	11451	14166	4.3	116	250	3486	12501
Brahmanbaria 250 Bed District Sadar Hospital	240324	213572	64856	60002	22580	25256	2.6	140	250	907	14898
Chandpur 250 Bed General Hospital	149976	153518	38937	40871	23558	28155	2.4	150	250	1785	3579
Chapainawabganj 250 bed District Hospital	182888	215012	24790	24488	30453	31314	2.5	416	250	1101	4600
Chittagong 250 Bed General Hospital	151168	173566	28977	16018	3769	6030	3.1	48	250	967	6753
Chuadanga District Hospital	106004	85434	42285	42847	25256	31778	2.1	343	250	1272	15830
Cox's Bazar 250 Bed District Sadar Hospital	155819	234077	72349	76856	43952	46505	3.0	282	250	1693	52757
Cumilla General Hospital	134254	201978	23404	16316	5092	6386	3.4	112	130	2263	12784
Dinajpur 250 bed General Hospital	89200	134447	30040	24413	9607	13259	3.3	82	250	1879	14140
Faridpur General Hospital	81168	66597	41416	31667	11780	8713	2.2	107	100	556	6092

Table 5.5. contd.

Table continued...											
Name of the district hospital	OPD visit		Emergency Visit		Admission		ALS	BOR	No.of bed	Major surgery	Minor surgery
	Male	Female	Male	Female	Male	Female					
Feni 250 Bed District Sadar Hospital	104081	109157	44149	46015	26126	36920	2.3	157	250	1754	14338
Gaibandha 250 bed District Hospital	146278	155841	47667	46312	20120	23243	2.2	108	250	1513	16385
Gopalganj 250 bed General Hospital	103824	159436	25349	22922	11423	14652	3.0	86	250	13336	18926
Habiganj 250 bed District Hospital	76209	126741	47851	46499	31153	31865	3.6	252	250	318	1560
Jamalpur 250 Beded General Hospital	195810	183541	53597	55788	39479	39075	2.8	226	250	3173	6031
Jashore 250 bed General Hospital	235805	390747	31857	37459	44723	50643	3.4	290	250	5414	36364
Jhalokathi District Hospital	72394	114452	35441	35505	5495	8107	2.5	89	250	290	7394
Jhenaidah 250 Bedded General Hospital	144605	238090	45216	36401	21996	30310	2.5	141	250	2662	10972
Joypurhat 250 bed District Hospital	122747	130769	29332	30083	27013	28049	3.1	248	250	4417	11123
Khagrachari District Hospital	80763	106109	9763	7049	9850	12721	3.0	175	250	1573	7309
Khulna 250 Bed General Hospital	112474	149328	14463	11744	2875	4749	5.5	72	250	709	15276
Kishoreganj 250 Bed District Sadar Hospital	161242	318441	61626	52436	27545	38378	1.5	108	250	996	20829
Kurigram 250 bed District Hospital	102828	118105	39382	44226	23595	30608	2.0	145	250	741	6339
Table 5.5. contd.											

Table continued...

Name of the district hospital	OPD visit		Emergency visit		Admission		ALS	BOR	No.of bed	Major surgery	Minor surgery
	Male	Female	Male	Female	Male	Female					
Kushtia 250 bed General Hospital	191621	286148	22812	20551	40181	43742	3.5	319	250	7023	12632
Lakshmipur District Hospital	114486	129794	35997	33162	20582	22283	2.5	293	250	626	10647
Lalmonirhat District Hospital	150318	176602	20930	23803	11664	14088	2.6	75	250	407	8566
Madaripur District Hospital	79411	118124	28296	34050	21355	25830	1.8	94	250	197	11454
Magura 250 bed District Hospital	122105	130558	59977	56116	28009	33084	2.5	164	250	1809	30854
Manikganj 250 Bed District Hospital	109043	137259	13349	11133	17050	20089	2.5	109	250	1275	4308
Meherpur 250 bed District Hospital	159814	180721	42967	44830	28241	29413	1.9	123	250	660	6270
Moulvibazar 250 bed District Sadar Hospital	131192	154236	53156	53670	20993	26353	2.4	125	250	2587	16770
Munshiganj 250 bed District Hospital	195403	202985	29615	33542	11536	16305	3.0	93	250	414	3039
Naogaon 250 bed District Hospital	141549	202964	53314	52514	26669	32908	1.8	283	250	1044	16197
Narail District Hospital	74451	132847	35026	38690	15871	21503	2.9	295	250	801	15394
Narayanganj General (Victoria) Hospital	154402	186793	110957	117599	22013	23654	1.7	207	100	264	8567
Narsingdi District Hospital	159711	214907	107279	110274	7574	8961	2.9	117	250	1168	12805
Natore District Hospital	117967	126735	17984	19301	24223	25819	2.6	302	250	4300	7819
Netrokona District Hospital	68171	103606	44066	47326	17123	25999	2.0	226	250	756	29240
Nilphamari 250 bed District Hospital	105423	143675	47183	54657	22633	30186	2.2	124	250	1374	10024

Table 5.5. contd.

Table continued...											
Name of the district hospital	**OPD visit**		**Emergency visit**		**Admission**		**ALS**	**BOR**	**No.of bed**	**Major surgery**	**Minor surgery**
	Male	**Female**	**Male**	**Female**	**Male**	**Female**					
Noakhali 250 Bed General Hospital	166762	193892	52357	49063	35181	32811	3.3	225	250	4514	19850
Pabna 250 bed General Hospital	133763	137871	74560	81028	51819	58383	1.9	193	250	3836	20813
Panchagarh District Hospital	87448	160679	8287	4464	15664	23547	2.2	233	250	945	13664
Patuakhali 250 bed Sadar Hospital	41720	53374	24388	26838	23490	26028	3.8	199	250	1587	9296
Pirojpur District Hospital	66158	98738	38449	37533	11536	15637	2.4	174	250	157	4928
Rajbari District Hospital	103983	176080	44348	44607	14169	23943	2.0	201	250	1445	3096
Rangamati General Hospital	58460	73586	13129	12567	9435	12045	2.9	162	250	1720	10554
Satkhira District Hospital	82487	79406	12595	13259	9558	11228	2.6	149	100	1119	18355
Shariatpur District Hospital	75578	93112	26724	31381	14485	18789	2.7	242	250	999	6074
Sherpur 250 bed District Sadar Hospital	120885	161801	51235	53607	32831	34625	2.7	506	250	2013	12798
Sirajganj 250 Bed General Hospital	77215	68563	32562	33113	22431	23035	2.4	117	250	2538	15827
Sunamganj 250 bed District Sadar Hospital	97498	101480	64532	65865	23307	28880	2.9	125	250	1796	9083
Sylhet Shahid Shamsuddin Ahmed District Hospital	78010	96762	2881	2257	1813	1979	5.6	59	250	445	1327
Tangail 250 Bed District Hospital	181476	183828	8612	7415	28914	32516	2.2	163	250	2256	15916
Thakurgaon District Hospital	77906	109967	19844	13668	31709	32814	3.2	224	250	1193	24506
Total	**7017980**	**8917195**	**2199558**	**2174813**	**1212927**	**1412987**	**2.8**	**178.0**	**14030**	**107023**	**730398**

District hospitals managed over 15.9 million OPD visits and 4.4 million admissions, with an average ALS of 2.8 days and BOR 178%. The data highlight heavy workloads and increasing demand for inpatient services at the secondary level.

Table 5.6. Outpatient, emergency and indoor attendance and other statistics of general hospitals (not district hospitals), 2024

Name of the general hospital	OPD visit		Emergency visit		Admission		ALS	BOR	No.of bed	Major surgery	Minor surgery
	Male	Female	Male	Female	Male	Female					
Kurmitola General Hospital	540323	703052	71258	70143	15500	19081	6.6	118	1200	3489	20842
Kuwait Bangladesh Friendship Govt. Hospital	103642	120718	16759	11671	3744	4914	4.3	59	250	928	2548
Narayanganj 300 bed Hospital	165195	201442	38776	32315	4925	5254	5.9	79	300	2155	16746
Narsingdi 100 Bed Zilla Hospital	111766	149744	29039	28845	7908	8489	3.8	169	100	799	9809
Saidpur 100 Bed Hospital, Nilphamari	73663	123688	16884	15801	8442	13233	2.1	128	100	206	10723
Shaheed Ahsan Ullah Master General Hospital	110276	107788	32982	28573	7376	9221	3.6	70	250	130	4595
Total	**1104865**	**1406432**	**205698**	**187348**	**47895**	**60192**	**4.4**	**103.8**	**2200**	**7707**	**65263**

These six hospitals collectively treated 2.5 million OPD patients, 0.4 million emergency cases, and 108,000 inpatients. Kurmitola General Hospital recorded the highest service volume, confirming its status as a major urban referral center.

Table 5.7. Outpatient, emergency and indoor attendance and other statistics of upazila health complexes, 2024

Name of the upazila health complex	OPD visit		Emergency visit		Admission		ALS	BOR	No.of bed	Major surgery	Minor surgery
	Male	Female	Male	Female	Male	Female					
All UHC	19230045	27837598	4535767	4562849	1514607	2134178	3.9	111	20534	28648	1962060

Upazila health complexes remain the backbone of hospital-based primary care, with over 47 million OPD visits, 9 million emergency contacts, and 3.6 million inpatient admissions. The average BOR of 111% shows efficient bed use despite limited infrastructure.

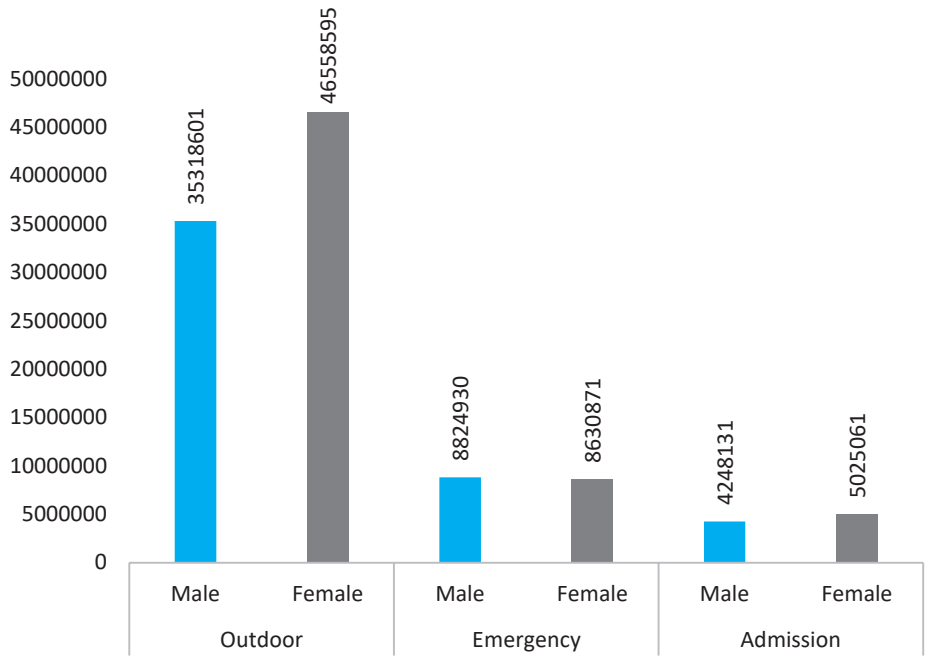

Figure 5.8. Total number of outpatient, emergency and inpatient attendance according to gender in 2024

Female patients accounted for a larger share of total attendance, particularly in outpatient and emergency care, reflecting both greater access and utilization of maternal and general health services.

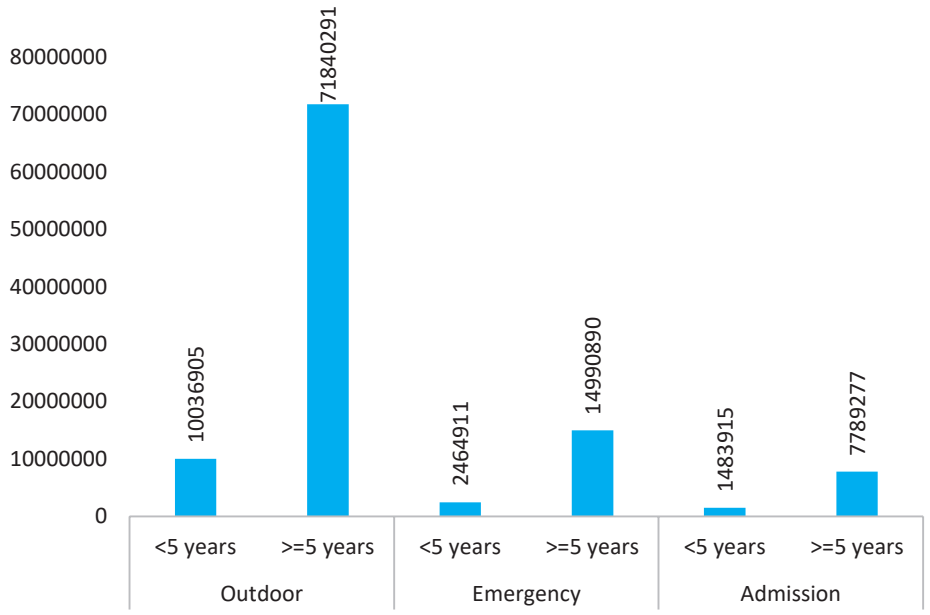

Figure 5.9. Total number of outpatient, emergency and inpatient attendance according to age group in 2024

Service utilization was higher among individuals over five years of age, though under-five children continued to represent a substantial proportion of visits, underscoring sustained demand for child health and preventive care services across facilities.

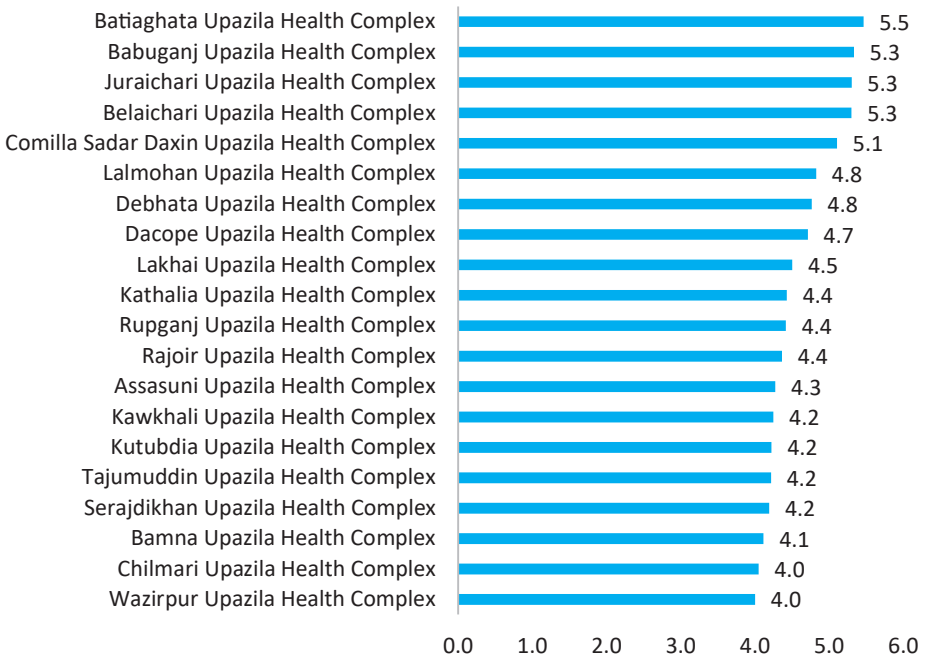

Figure 5.10. Twenty upazila health complexes with the highest average length of stay of inpatients, 2024

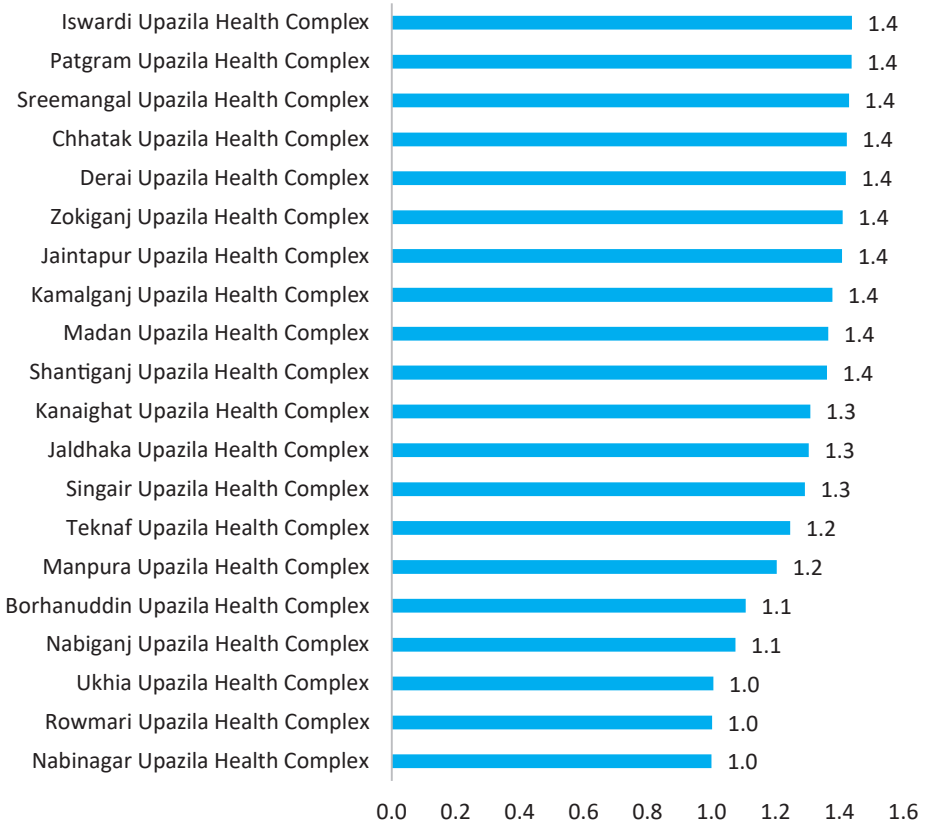

Figure 5.11. Twenty upazila health complexes with the lowest average length of stay of inpatients,2024

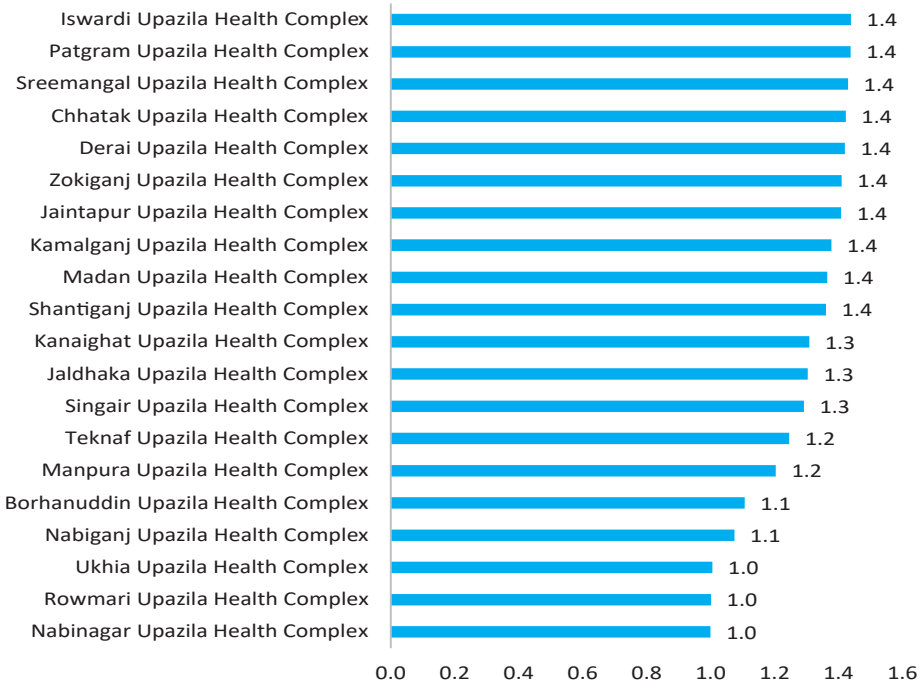

Figure 5.12. Twenty upazila health complexes with the highest BOR, 2024

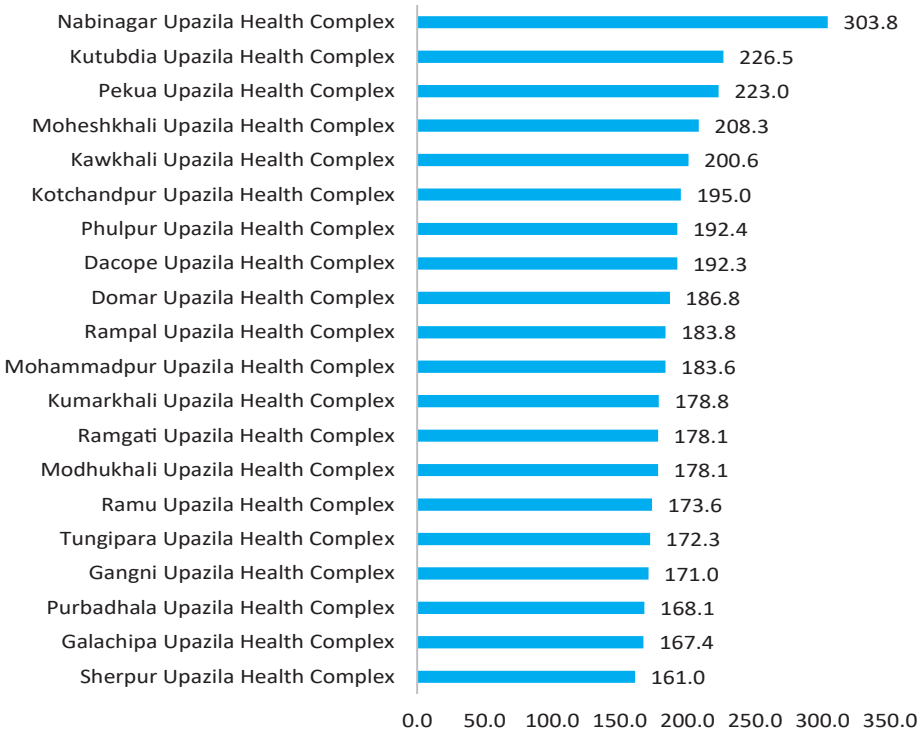

Figure 5.13. Twenty upazila health complexes with the lowest BOR, 2024

Wide variability was observed among upazilas. High-ALS facilities indicate chronic case loads or referral delays, while low-BOR sites point to under-utilization needing targeted resource redistribution and supervision.

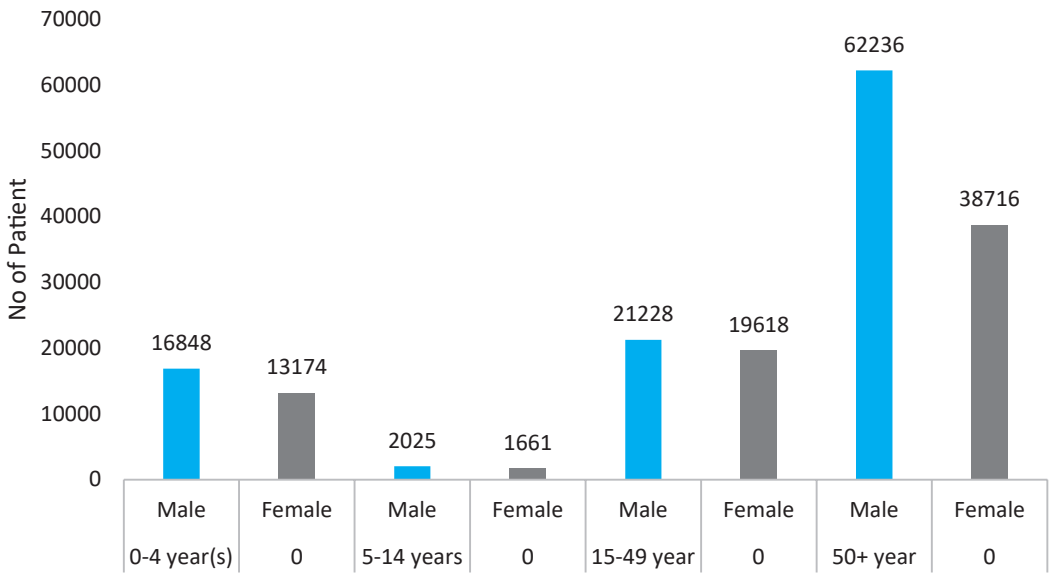

Figure 5.14. Number of deaths according to age and sex, reported from five types of government health facilities, 2024

Mortality data reveal higher death counts among males and older adults, consistent with national demographic and disease patterns. Strengthened emergency and geriatric services could further reduce avoidable mortality.

Interpretation of Key Findings

In 2024, Bangladesh's curative care services demonstrated steady growth and improved efficiency across all tiers of the health system. Service utilization increased notably in outpatient, inpatient, and emergency care, supported by strengthened facility readiness and reporting mechanisms.

Upazila Health Complexes continued to provide the bulk of hospital-based services, while district and medical college hospitals managed increasing caseloads, resulting in bed occupancy ratios exceeding 100%—a sign of both strong demand and capacity strain. Specialized hospitals maintained high service throughput, particularly in cardiology, neurology, and trauma care.

The introduction of hospital category reclassification in 2024 slightly affected historical trend comparisons but improved reporting accuracy. Gender and age-disaggregated data revealed higher female attendance overall and a sustained share of under-five consultations, emphasizing the system's continued focus on maternal and child health.

Overall, the findings indicate progress toward equitable and efficient service delivery, reflecting the health system's growing capacity to respond to population needs and maintain essential curative functions even under resource and demand pressures.

Recommendations

1. **Expand hospital infrastructure and optimize bed distribution** Complete the construction of under-development medical college hospitals and upgrade selected district hospitals to alleviate overcrowding, particularly in Dhaka and Chattogram divisions where bed occupancy consistently exceeds 100%.

2. **Strengthen referral and continuum-of-care systems** Establish a structured digital referral tracking mechanism among all tiers to improve patient flow, reduce duplication, and ensure timely management of critical cases.

3. **Improve hospital management efficiency** Introduce real-time hospital dashboards linked to DHIS2 to monitor admissions, discharges, bed status, and service utilization, enabling data-driven decision-making at facility and national levels.
4. **Enhance surgical and emergency care capacity** Expand surgical theatres, strengthen post-operative care, and ensure 24/7 emergency readiness through skill-based training and adequate supplies of essential drugs and equipment.
5. **Institutionalize quality assurance and clinical governance** Implement standardized hospital performance audits, morbidity and mortality reviews, and patient safety protocols to improve service quality and accountability.
6. **Invest in human resource redistribution and upskilling** Address urban–rural disparities by deploying specialized doctors, nurses, and technologists to underserved hospitals and implementing continuous professional development programs.
7. **Promote integration of digital hospital systems** Scale up electronic medical record (EMR) systems and link them with national health information platforms as well as with the health information exchange system to strengthen service tracking, billing, patient record management, and seamless clinical data exchange among facilities.
8. **Enhance financial sustainability and partnerships** Explore performance-based financing and public–private partnership (PPP) models for tertiary care hospitals to diversify funding and improve infrastructure maintenance.
9. **Strengthen monitoring and research on hospital efficiency** Encourage operational research on bed utilization, referral effectiveness, and patient satisfaction to guide evidence-based reforms in hospital service delivery.

Technical Notes

1. **Data Sources**
   Service statistics were compiled from the DHIS2 Hospital Module, where each facility directly reports daily, monthly data on outpatient, inpatient, emergency, Bed Occupancy Ratio (BOR), and Average Length of Stay (ALS). Sanctioned bed information was

Figure 5.15. The Health and Family Welfare Advisor Nurjahan Begum visited the Taraganj Upazila Health Complex in Rangpur today to inspect its services. Prof. Dr. Md. Abu Jafor, Director General, DGHS was also present there.

sourced from the MIS, DGHS Facility Registry and Bed Statement (2024).

2. **Hospital Category Reclassification (2024)**
   In 2024, DGHS restructured hospital categories to better align data with functional service level hospital groups (specialized, medical college, district, general, and upazila). This reclassification improved reporting accuracy but limits direct comparability with previous years.

3. **Computation of BOR and ALS**

   - BOR was calculated as the ratio of inpatient-days to available bed-days (×100).
   - ALS represents the average number of days patients remain admitted per discharge. These indicators are generated automatically within the DHIS2 system based on monthly facility submissions.

4. **Surgical Statistics**
   Data on major and minor surgeries were extracted from DHIS2 reports and verified against annual summaries. Differences from previous years may reflect improved completeness of reporting and inclusion of newly operational hospitals.

5. **Facility Coverage**
   The dataset includes all public hospitals under DGHS operational control (upazila to national level). Private, NGO, and autonomous hospitals are excluded unless otherwise specified.

6. **Data Quality and Validation**
   Data completeness across reporting hospitals exceeded 95% in 2024. Validation was carried out through monthly cross-checks by MIS, DGHS, in collaboration with divisional health offices. Minor gaps were corrected through follow-up verification with respective facilities.

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Morbidity and Mortality Status

Executive Summary

In 2024, the Directorate General of Health Services (DGHS) strengthened national morbidity and mortality surveillance through expanded digital reporting and ICD-10–based classification. Over 9.3 million inpatients were recorded, with 94% captured individually through the DHIS2 platform—reflecting major progress toward comprehensive hospital data coverage.

Morbidity trends show a persistent dual disease burden: infectious diseases such as respiratory infections and diarrhoea remain common among children, while non-communicable diseases (NCDs), notably hypertension, diabetes, and heart diseases, dominate adult hospitalizations. Seasonal peaks in admissions during mid-year months corresponded with infectious and vector-borne disease activity.

Mortality data from the Medical Certification of Cause of Death (MCCoD) and Verbal Autopsy (VA) systems reaffirm this epidemiological shift. Ischaemic heart disease, stroke, and chronic respiratory disease were the leading causes of death, together accounting for most reported facility and community deaths. Among children, low birth weight, asphyxia, and pneumonia continued to drive mortality, while injuries, drowning, and road accidents were major contributors among younger adults.

Integration of inpatient and MCCoD systems within DHIS2, complemented by VA data from the community, has created a more unified national mortality picture. However, challenges persist — including duplicate records, incomplete individual reporting, and limited private hospital integration. Strengthening data validation, linking with CRVS, and promoting facility-level use of data for planning and performance improvement remain priorities for achieving a complete, reliable, and actionable national health information system.

Background and Strategic Objectives

Background

The Directorate General of Health Services (DGHS) has been collecting morbidity data to monitor disease patterns and service utilization across the country. Initially, online-based aggregated reporting of hospital data began in 2008, enabling regular compilation of information from public health facilities. To improve data quality and clinical specificity, individual inpatient (hospitalized patient) data collection was introduced in 2017, covering all government health facilities under DGHS.

These morbidity data provide critical insights into the disease burden, service demand, and evolving health trends in Bangladesh. They serve as a key evidence base for program planning, resource allocation, and monitoring the performance of hospital services and disease-control programs. While morbidity statistics are primarily derived from inpatient data, delivery-related information is compiled from aggregated facility reports to ensure comprehensive coverage of maternal health indicators.

In parallel, mortality data collection was strengthened through the introduction of the Medical Certification of Cause of Death (MCCoD) and Verbal Autopsy (VA) systems, both initiated as pilots in 2017.

The MCCoD system introduced the internationally standardized death certificate to identify the underlying cause of death using medical judgment. This initiative was scaled up to cover all government hospitals and several private facilities in 2022, with data regularly reported through the national digital health portal.

The Verbal Autopsy (VA) system, on the other hand, was implemented in sample-based upazilas to determine causes of community deaths occurring outside health facilities. Using

structured interviews and ICD-10 coding, the VA process helps capture cause-specific mortality fractions (CSMFs) for deaths without medical certification, thus complementing hospital-based data.

Together, MCCoD and VA systems now generate complementary facility and community mortality data, providing an integrated foundation for evidence-based health policy.

Strategic Objectives

- Monitor disease and mortality patterns across all population groups, age categories, and administrative levels through standardized hospital- and community-based reporting systems.
- Generate reliable and comparable evidence on the burden of communicable, non-communicable, maternal, and injury-related conditions to support national planning and policy formulation.
- Strengthen the national health information architecture by institutionalizing routine collection, validation, and analysis of both morbidity and mortality (MCCoD and VA) data.
- Enhance data quality, interoperability, and timeliness through integration with digital platforms, dashboards, and automated analytical tools for real-time decision-making.
- Improve health system preparedness and accountability by identifying priority diseases, preventable causes of death, seasonal variations, and emerging public health threats.
- Promote data-driven health governance by linking hospital and community mortality data to national CRVS and DHIS2 systems for comprehensive mortality surveillance.

Current Status and Trends

In 2024, DGHS expanded digital reporting and improved data quality across morbidity and mortality systems. A total of 9,387,897 inpatient cases were reported from government hospitals, of which 8,829,837 (94%) were captured individually through DHIS2. Likewise, 176,707 aggregated deaths from the government hospitals and 182,735 individual death records from all government hospitals, including data from selected private facilities.

Hospital admissions reflected disease burden, infectious diseases among children and non-communicable diseases (NCDs) among adults. Respiratory infections, diarrheal diseases, and injuries were the leading causes of hospitalization. Among under-five children, pneumonia, diarrhea, and malnutrition predominated, while obstetric complications and accidental injuries were frequent in adults aged 15–44 years. For those aged 45 and above, hypertension, diabetes, and heart disease were most common. Admissions peaked mid-year with seasonal surges in infectious and vector-borne diseases. Government hospitals managed most deliveries, while private facilities performed more cesarean sections.

Non-communicable diseases accounted for over two-thirds of reported deaths. Ischaemic heart disease, stroke, chronic respiratory disease, and diabetes were leading causes, while low birth weight, asphyxia, and pneumonia were major causes of child mortality. Injuries and road traffic accidents were notable among young adults. Verbal Autopsy (VA) findings from community deaths mirrored hospital data; NCDs dominated among males, while maternal causes and breast and cervical cancers were more frequent among females. VA coverage remains dependent on death registration completeness.

Digital integration and individual-level reporting through DHIS2 improved substantially, though duplication, incomplete entries, and limited private-sector participation persist. Overall, Bangladesh has made significant progress toward a comprehensive morbidity and mortality surveillance system. Integration of inpatient, MCCoD, and VA data now provides a clearer national picture, supported by continued efforts in data validation, interoperability, and facility-level data use.

Program Implementation Highlights

- **Expansion of Individual Inpatient Data Reporting** The DGHS successfully maintained nationwide implementation of the hospital-based individual inpatient (morbidity) data system across all government health facilities. In 2024, over 8.8 million patient records were reported individually, covering major public hospitals from upazila to the tertiary level. This has significantly enhanced disease-specific data availability, complementing the aggregated reporting system.
- **Strengthening of Death Certification (MCCoD) in Hospitals** The Medical Certification of Cause of Death (MCCoD) system continued to expand, using the international standard death certificate. All government hospitals and selected private facilities are now routinely reporting MCCoD data to the national digital health portal, enabling more accurate identification of underlying causes of death and improved mortality statistics.
- **Implementation of Verbal Autopsy for Community Deaths** The Verbal Autopsy (VA) system, implemented in sample-based upazilas, continued to provide cause-specific mortality data for deaths occurring outside health facilities. VA interviews, conducted through structured questionnaires and ICD-10 coding, have been instrumental in understanding community-level death patterns, particularly in rural areas where medical certification is unavailable.
- **Integration of Morbidity and Mortality Data Platforms** Both morbidity and mortality reporting systems have been progressively linked with the national DHIS2-based reporting portal, ensuring improved data quality and accessibility for analysis and visualization through dashboards and national reporting tools.
- **Capacity Building and Data Quality Improvement Initiatives** Continuous capacity development activities were undertaken to improve ICD-10 coding accuracy, data entry completeness, and use of electronic systems. Routine supervision, feedback mechanisms, and refresher training were conducted to strengthen reporting compliance across facilities.
- **Evidence Use for Policy and Planning** The integrated morbidity and mortality datasets are now routinely used in disease surveillance, resource allocation, and program performance monitoring. These data inform strategic planning for NCD control, maternal and neonatal care, and emergency response preparedness.
- **Linkage with National CRVS** Both MCCoD and VA initiatives are aligned with the National CRVS Action Plan, aiming to achieve a unified, continuous mortality surveillance framework that captures deaths both inside and outside health facilities.

Key Indicators

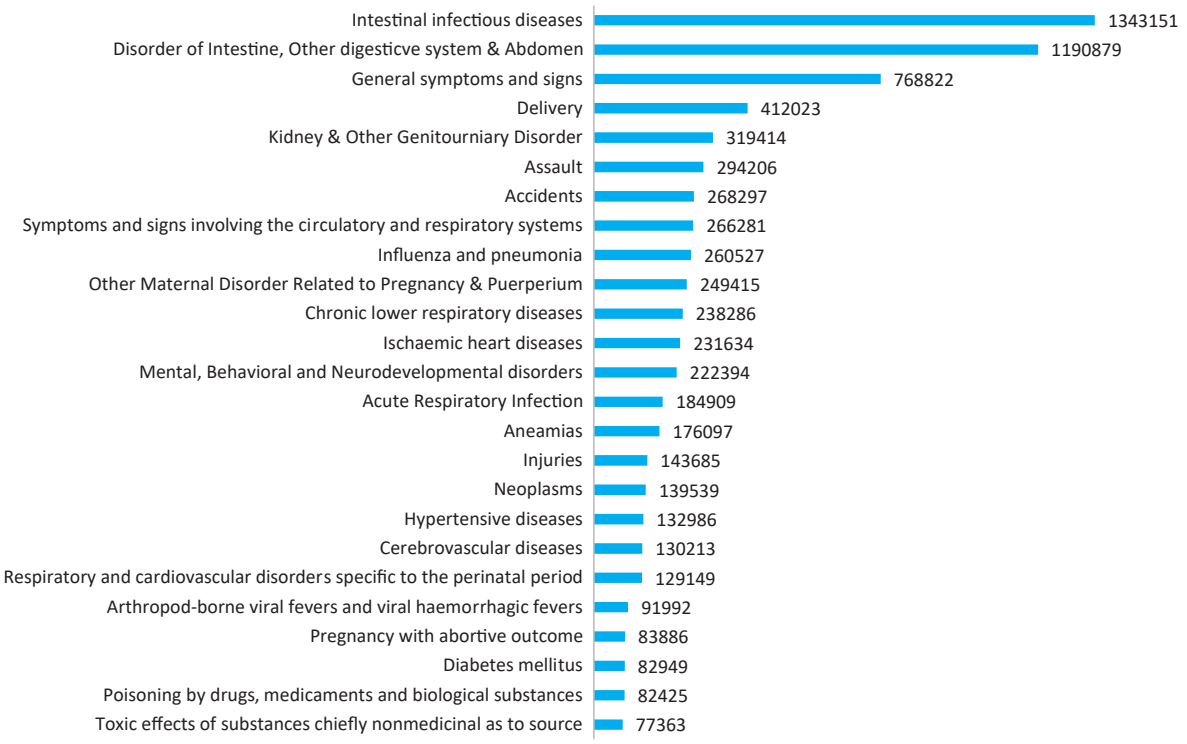

Figure 6.1. Top 25 causes of admission in 2024

Respiratory tract infections, diarrheal diseases, and injuries were the leading causes of admission, with higher prevalence among males and younger age groups.

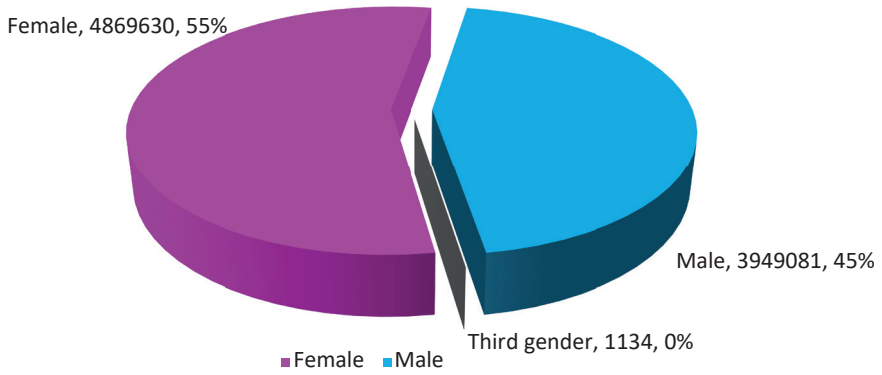

Figure 6.2. Sex ratio of admitted patients in 2024

The male-to-female admission ratio indicates slightly higher female hospitalizations, reflecting possible gender-related health-seeking behavior differences.

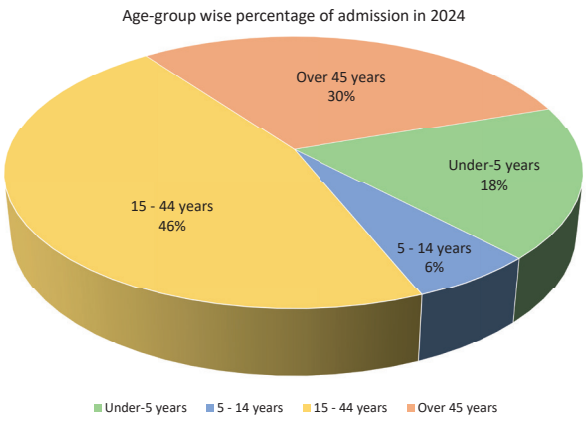

Figure 6.3. Age-group distribution of patients admitted in 2024

Admissions were concentrated among the 15–44-year and over-45-year age groups, indicating the burden of adult and chronic conditions.

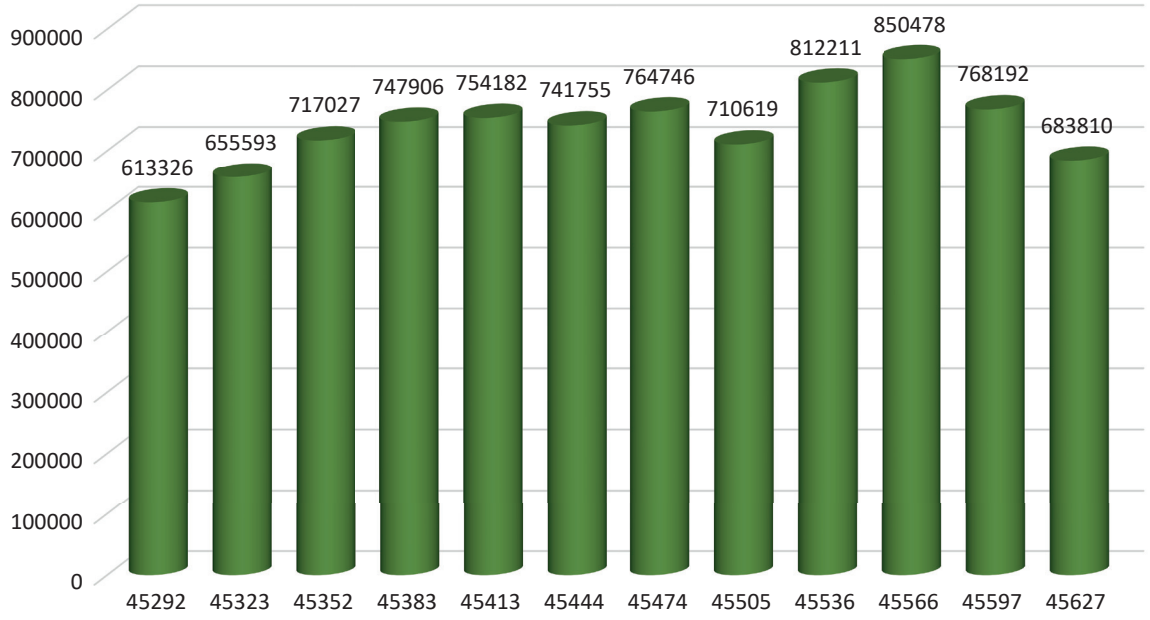

Figure 6.4. Month-wise total number of admissions in all health facilities in 2024

Admissions peaked during seasonal disease periods, with notable increases in the middle months, suggesting possible links to vector-borne and infectious disease patterns.

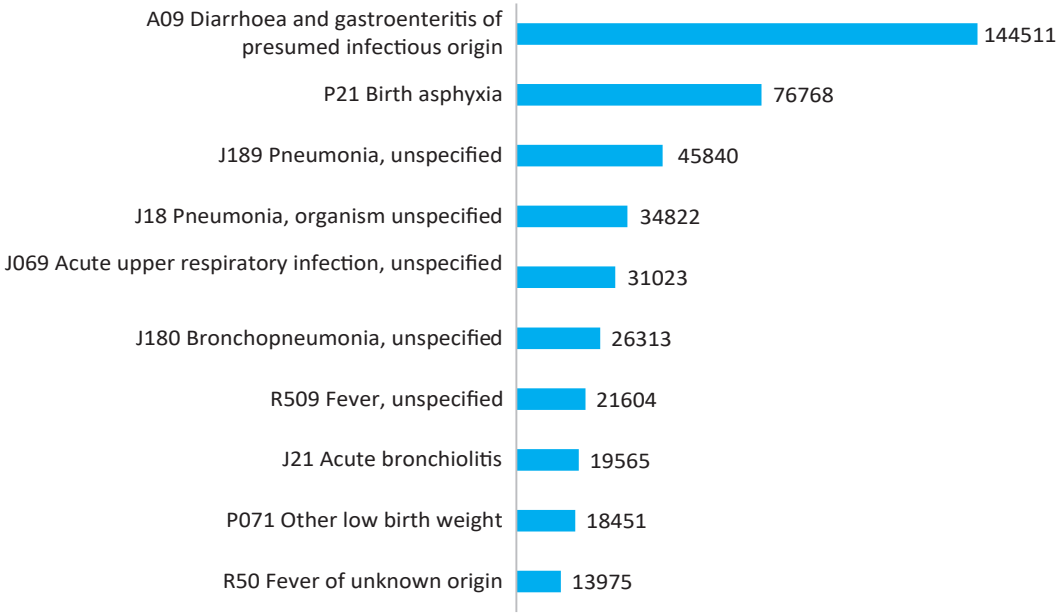

Figure 6.5. Top 10 causes of admission among patients aged under 1 year in all public health facilities of Bangladesh, 2024

Among infants under one year, respiratory infections and neonatal conditions were the most common causes of admission, highlighting early-life health vulnerabilities.

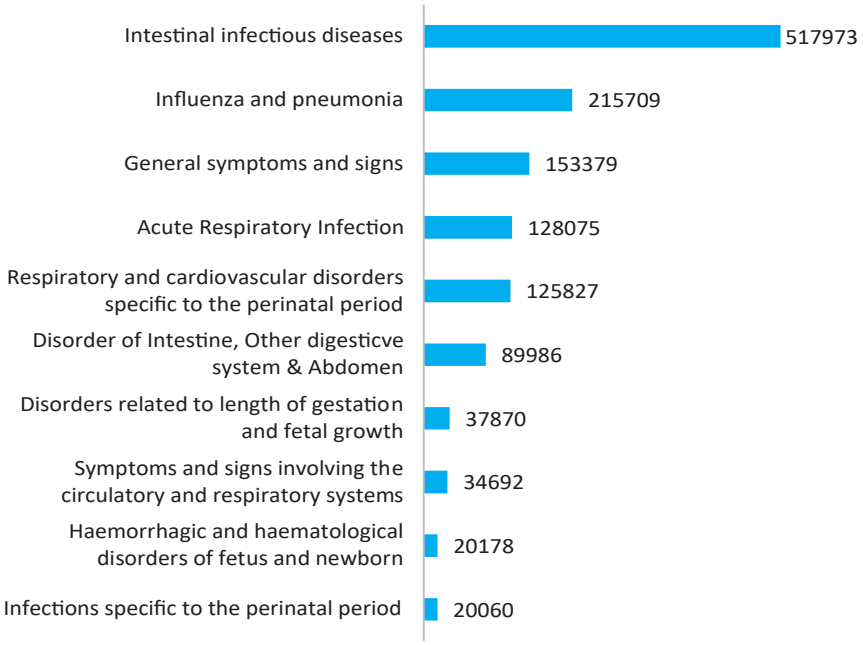

Figure 6. 6. Top 10 causes of admission among patients aged under-5 years in all health facilities of Bangladesh, 2024

Pneumonia, diarrhoea, and malnutrition remained the dominant causes of admission among under-five children, indicating ongoing vulnerability to preventable infectious and nutritional diseases.

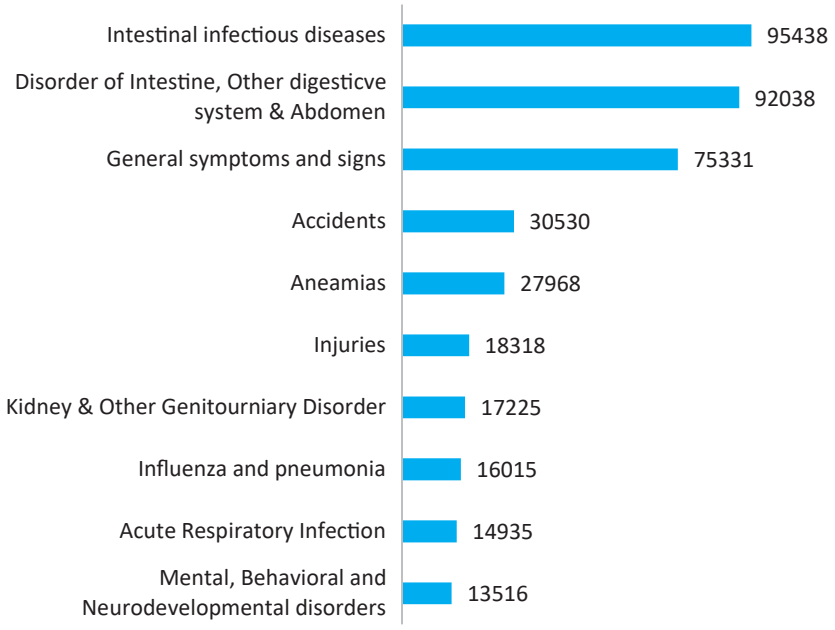

Figure 6. 7. Top 10 causes of admission among patients aged 5-14 years in all health facilities of Bangladesh, 2024

In this age group, injuries, respiratory infections, and gastrointestinal diseases were the leading reasons for hospitalization, reflecting the influence of both environmental and behavioural factors.

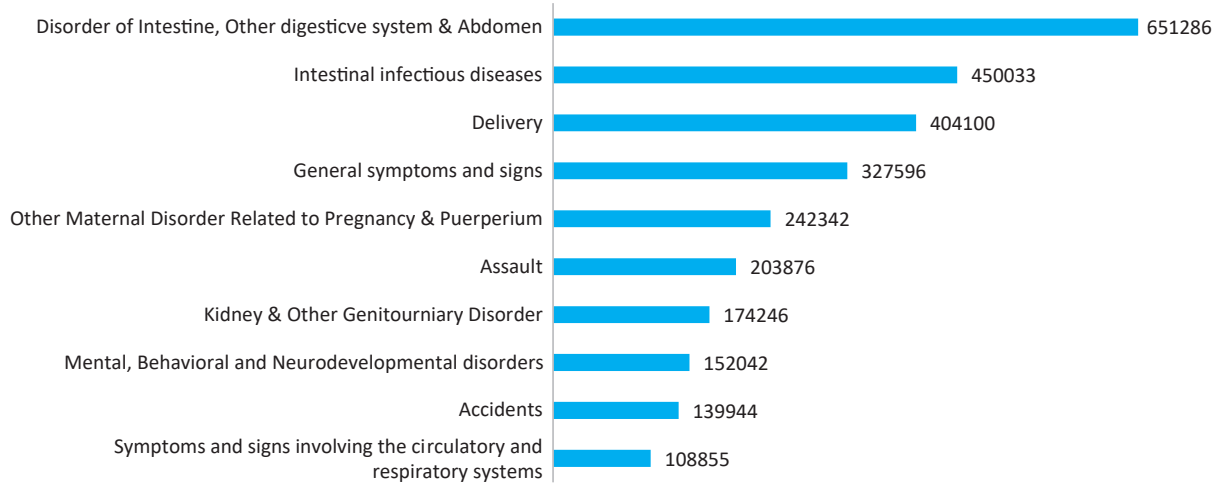

Figure 6. 8. Top 10 causes of admission among patients aged 15-44 years in all health facilities of Bangladesh, 2024

Admissions were largely driven by obstetric complications and accidental injuries, highlighting the prominence of reproductive health issues and occupational or transport-related hazards among adults.

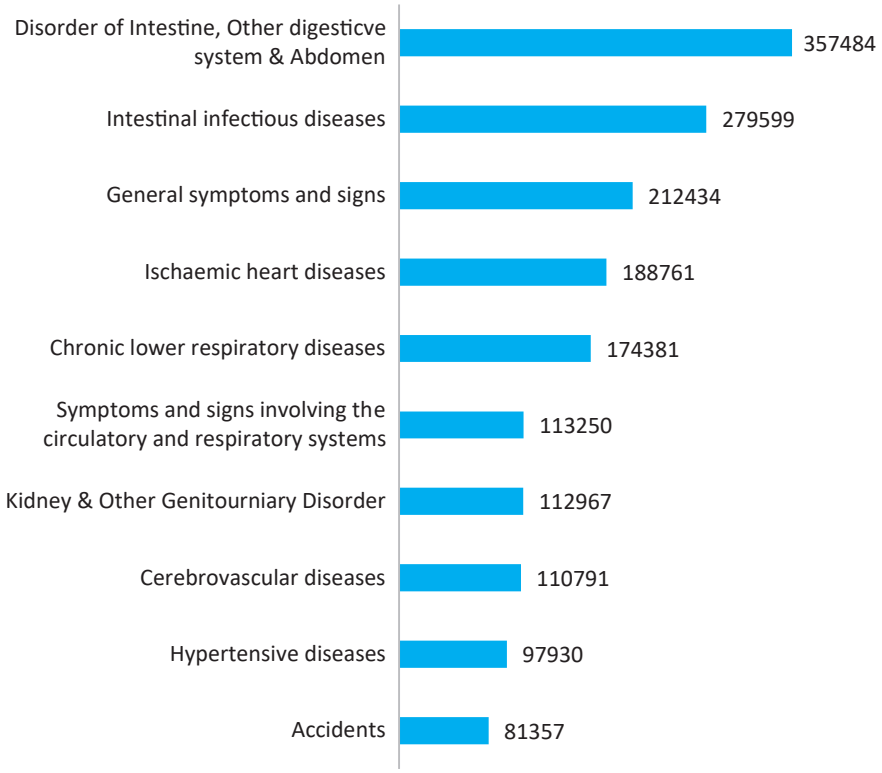

Figure 6.9. Top 10 causes of admission among patients aged over 45 years in all health facilities of Bangladesh, 2024

For adults aged over 45 years, non-communicable diseases like hypertension, diabetes, and heart diseases were the primary reasons for hospitalization.

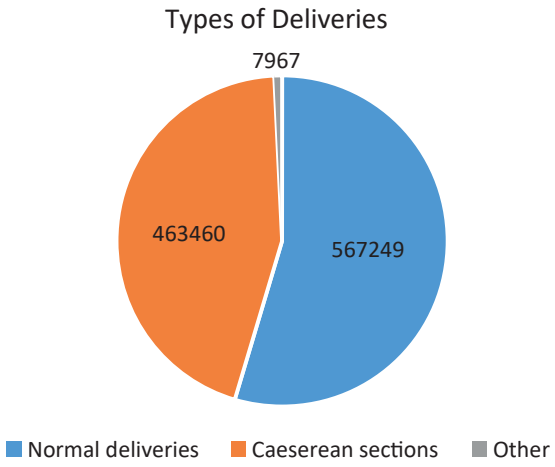

Figure 6.10. Number of different types of deliveries in all reporting facilities (govt. and pvt.) in 2024

Normal deliveries were most common across facilities, with significant proportions of cesarean sections, indicating ongoing reliance on surgical deliveries.

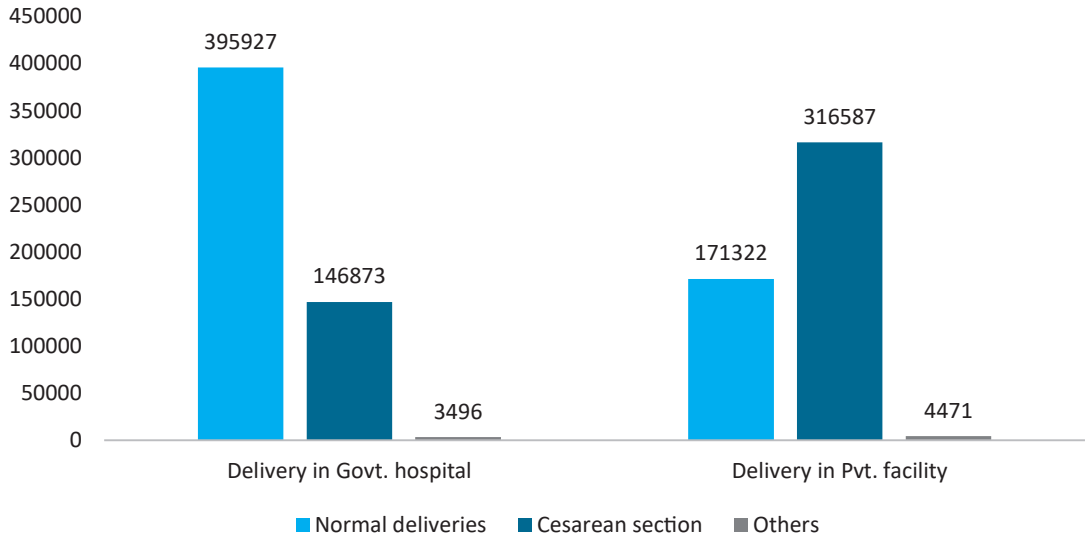

Figure 6.11. Facility-wise deliveries in 2024

Government facilities handled the majority of institutional deliveries, but private sector contributions were substantial, especially in urban areas.

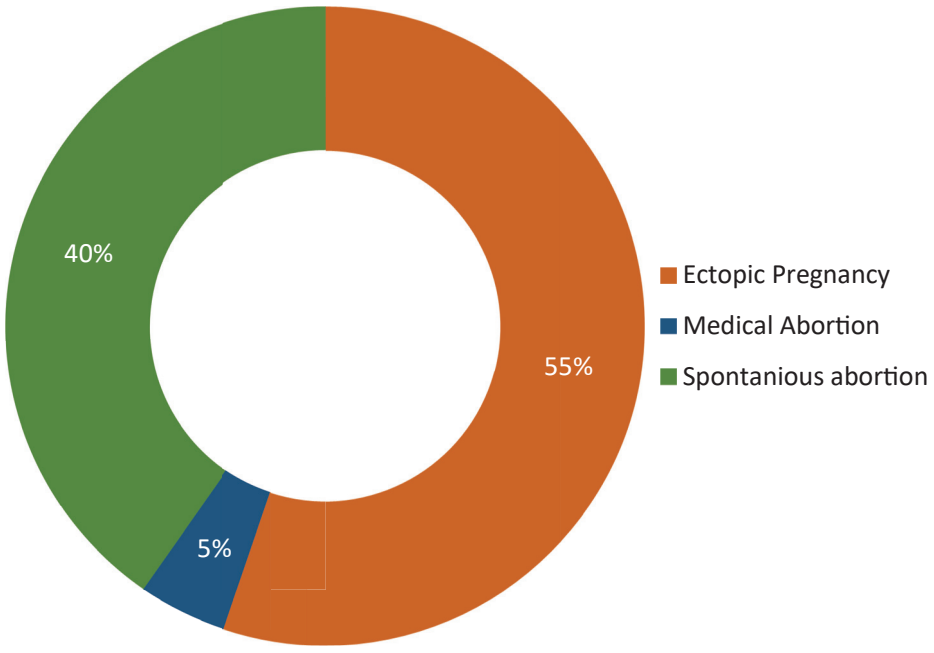

Figure 6.12. Percentage of different abortion outcomes at reporting facilities in 2024

Incomplete abortions accounted for the highest share among abortion outcomes, suggesting gaps in access to safe abortion and post-abortion care.

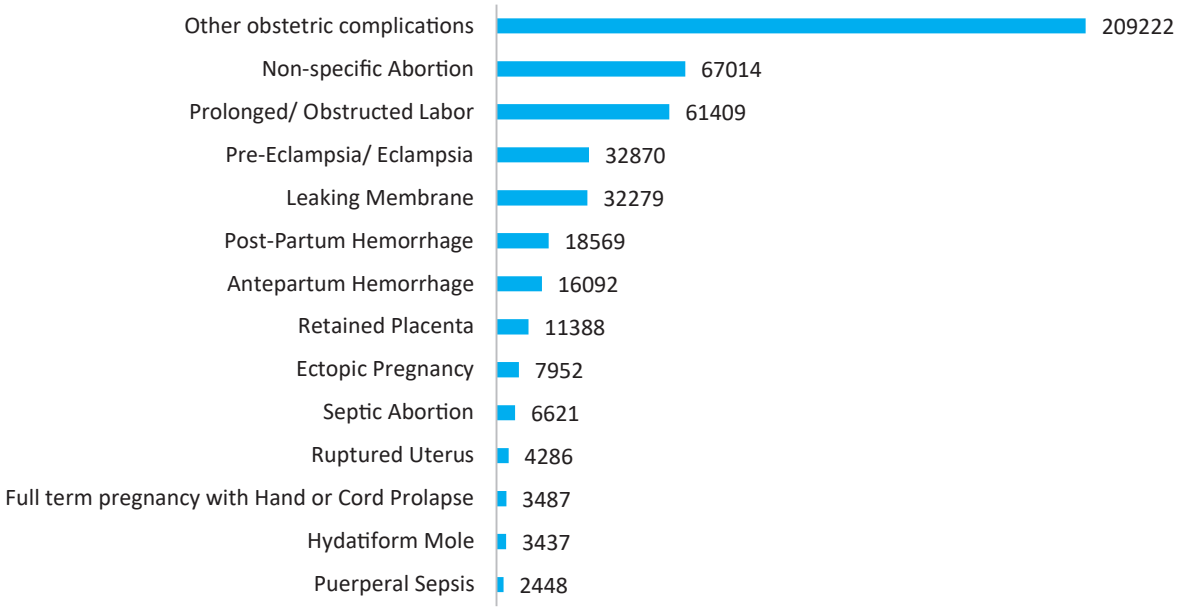

Figure 6.13. Top 14 complications of labour in 2024

Postpartum haemorrhage and prolonged labour were the most frequent complications, highlighting the need for strengthened maternal emergency management services.

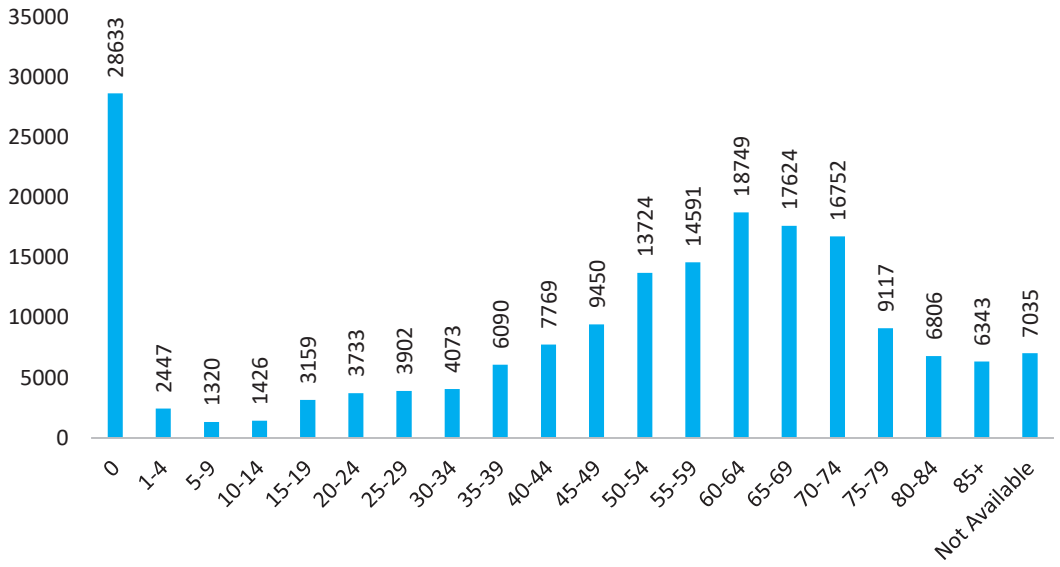

Figure 6.14. Age Group–wise distribution of reported deaths, Bangladesh, 2024

In 2024, the highest number of deaths occurred among infants (under 1 year), followed by a gradual rise from young adulthood to older ages. Mortality sharply increased after age 50, peaking in the 60–69 years age group. This pattern reflects both high neonatal mortality and the growing burden of age-related chronic diseases. The data highlight a dual mortality burden—early-life vulnerability and late-life NCD dominance.

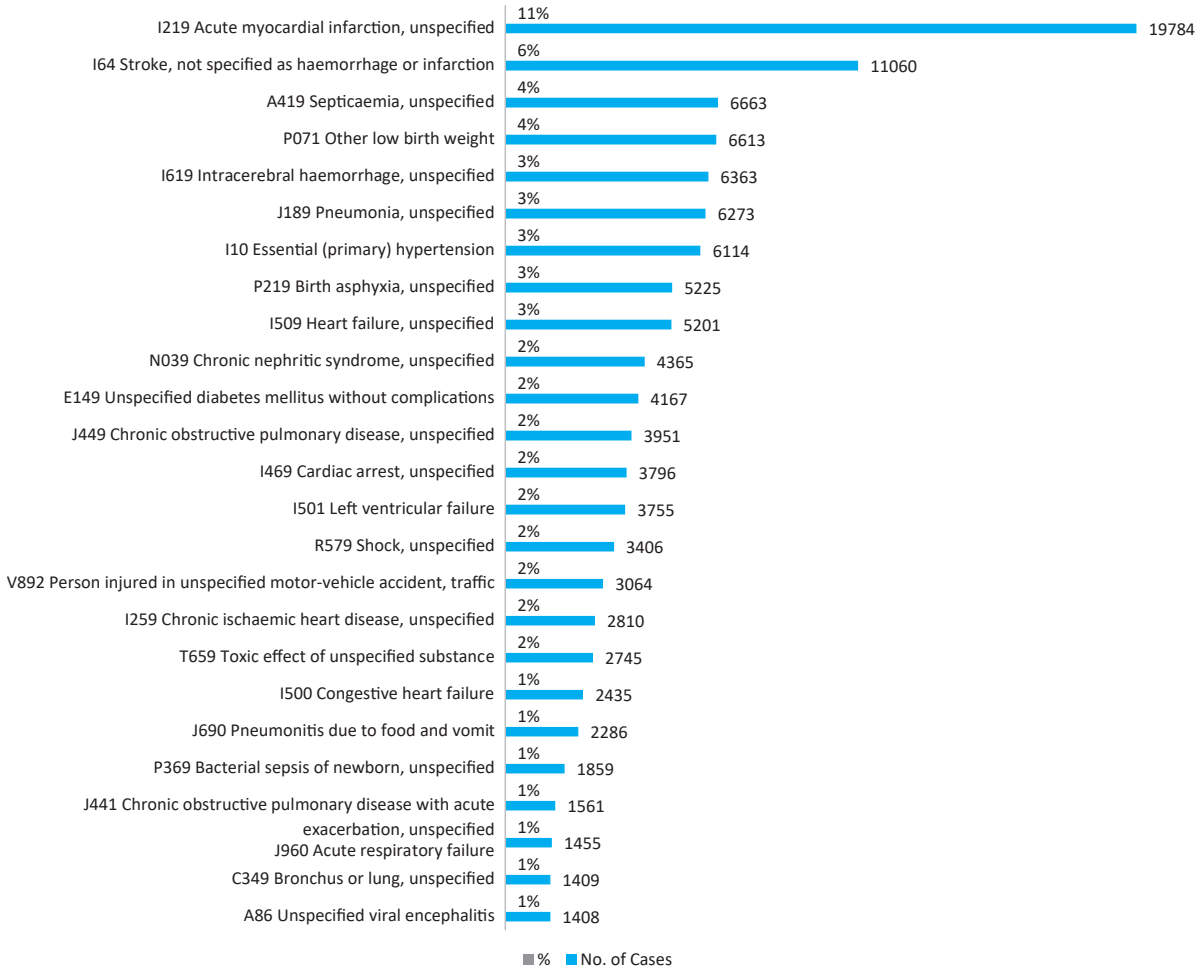

Figure 6.15. Top 25 causes of mortality in Bangladesh, 2024 — classified according to ICD-10

In 2024, ICD-10–based mortality data indicate that non-communicable diseases (NCDs) dominate the leading causes of death in Bangladesh. Acute myocardial infarction (I219) was the foremost cause, accounting for about 11% of total reported deaths, followed by stroke (I64) at 6%. Other prominent causes include septicaemia, low birth weight, intracerebral haemorrhage, pneumonia, and hypertension, each contributing roughly 3–4%.

Overall, the pattern highlights a continued epidemiological transition—from infectious and maternal causes toward chronic and cardiovascular conditions. Neonatal and perinatal causes such as birth asphyxia and low birth weight also remain significant contributors, reflecting persistent challenges in maternal and newborn health alongside the growing NCD burden.

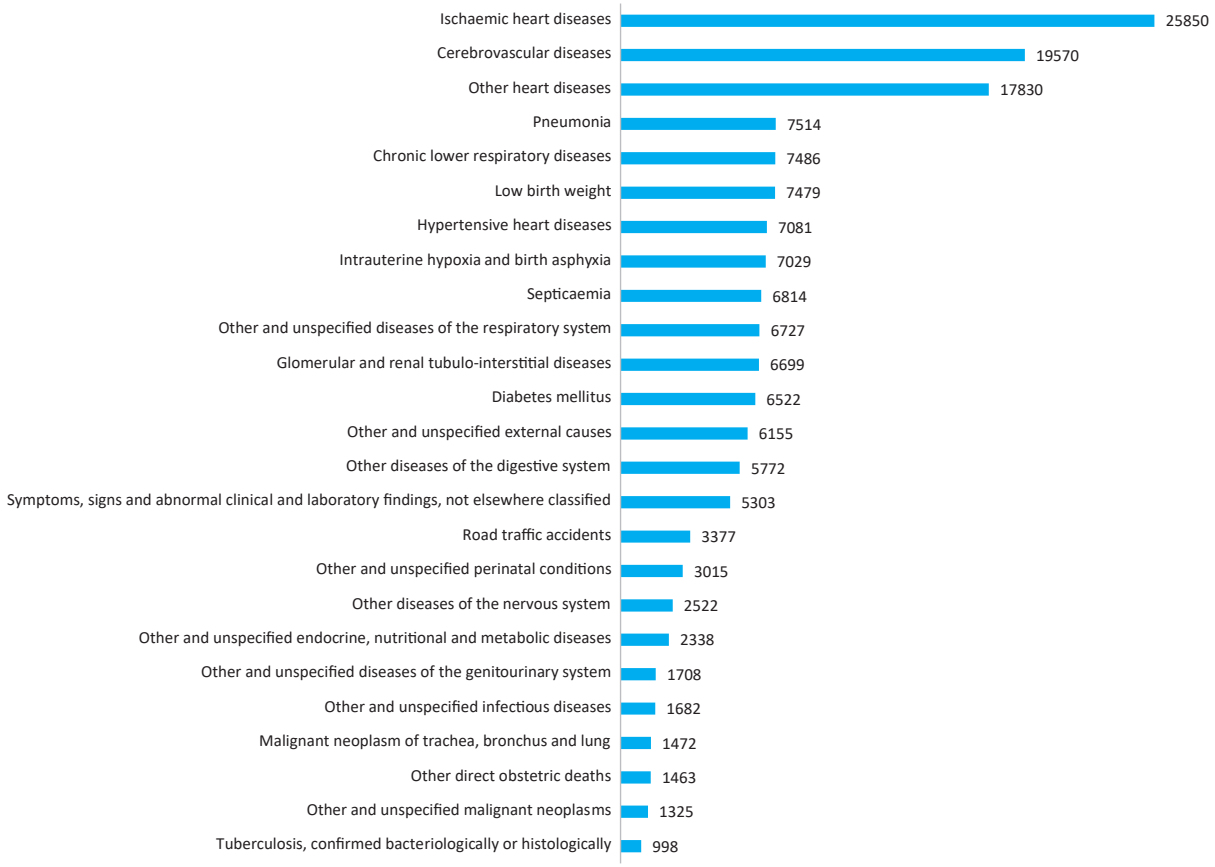

Figure 16.16. Leading causes of death by disease group, Bangladesh, 2024

In 2024, deaths in Bangladesh were mainly due to non-communicable diseases, led by ischaemic heart disease, stroke, and other heart diseases.
Respiratory infections, perinatal conditions, and diabetes also contributed notably.
This pattern reflects a clear shift toward chronic and lifestyle-related causes, while infectious and neonatal causes still persist.
The findings highlight the need for integrated NCD prevention and maternal–child health interventions.

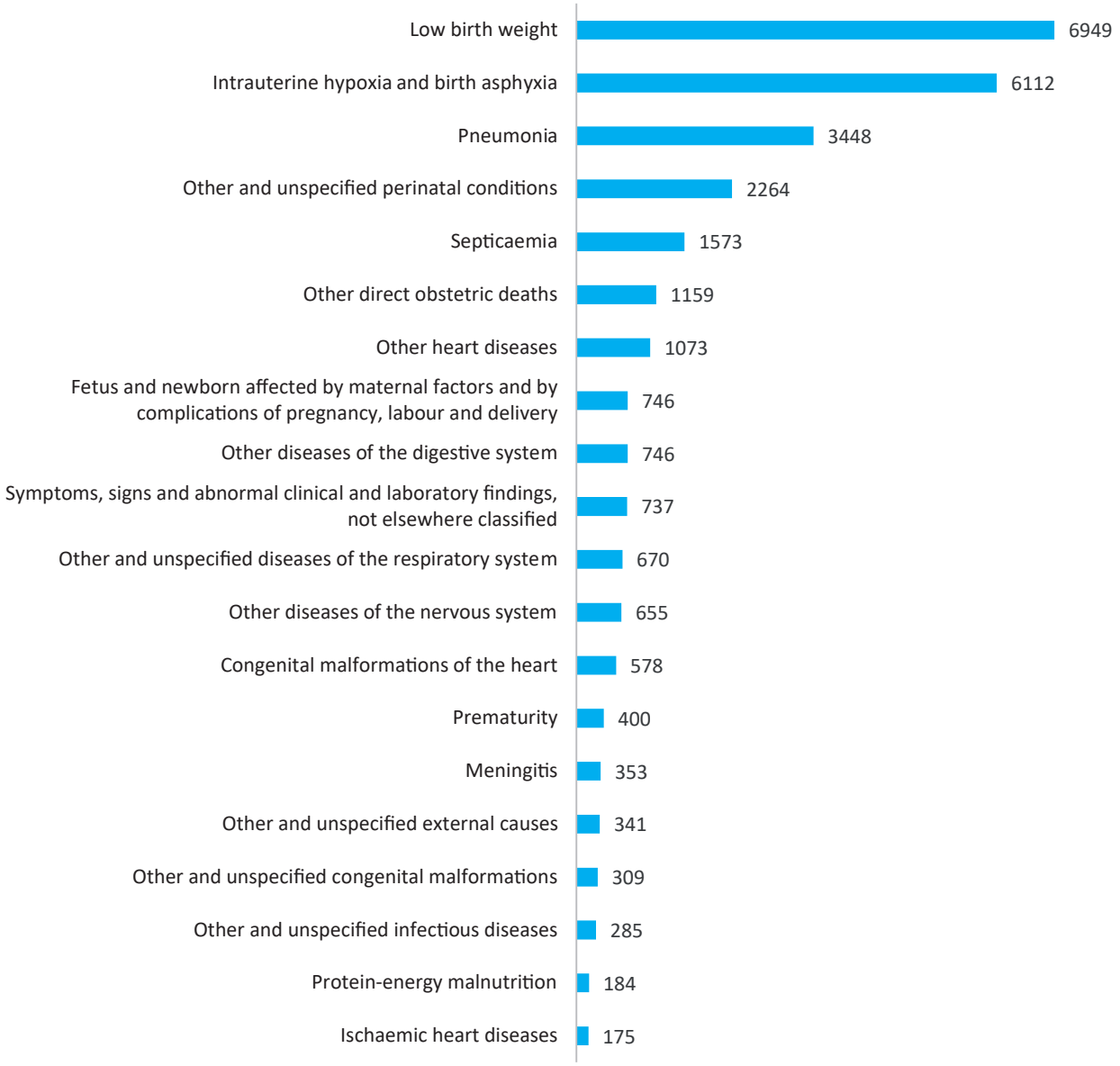

Figure 6.17. Leading causes of death among children Under-Five years, Bangladesh, 2024

Deaths among under-five children were mainly caused by low birth weight, birth asphyxia, and pneumonia. Perinatal and neonatal conditions such as sepsis and maternal complications also featured prominently. These causes reflect persistent challenges in newborn and maternal care, alongside preventable infectious diseases. Improving antenatal, delivery, and early neonatal care remains critical to reducing child mortality in Bangladesh.

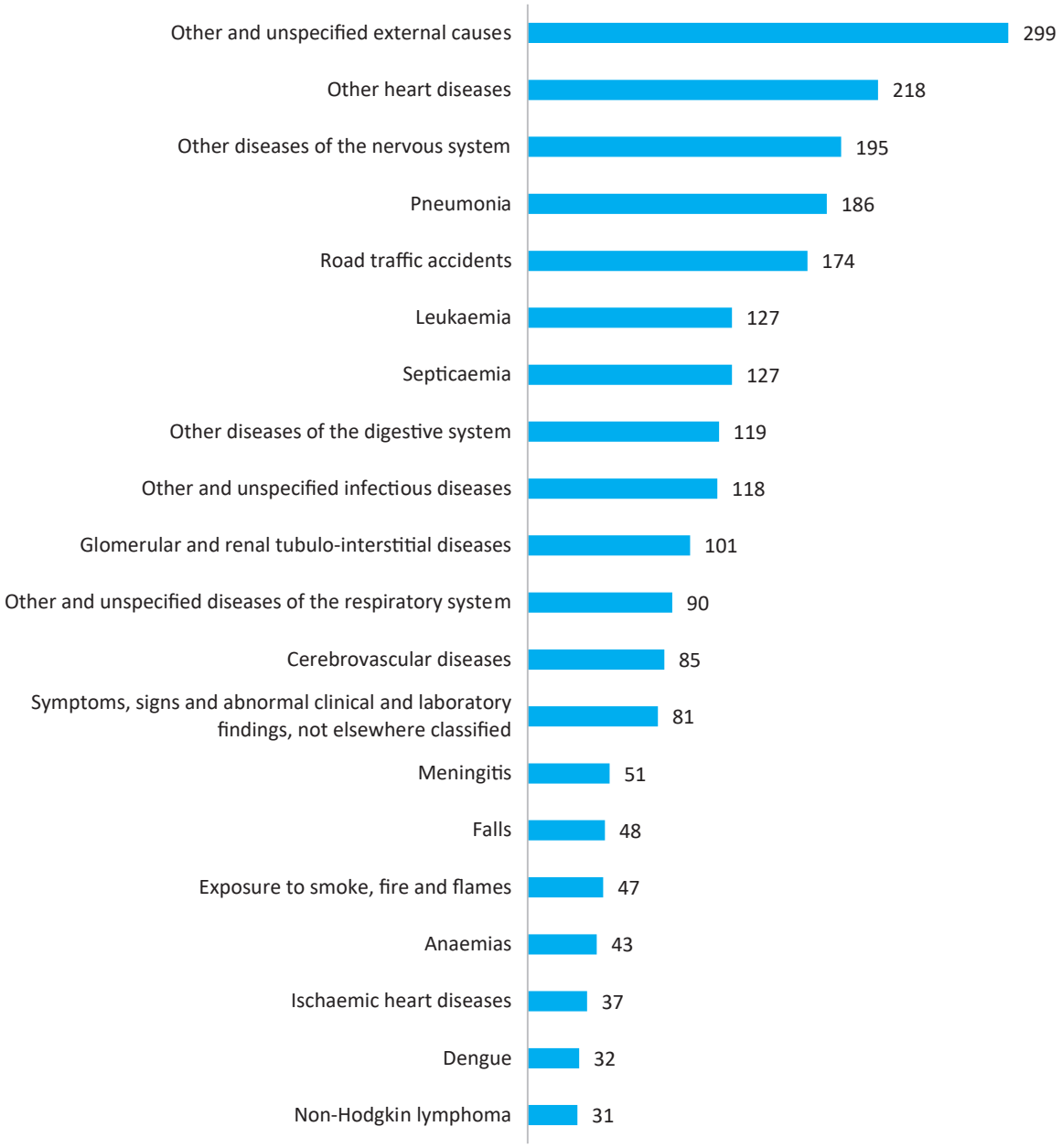

Figure 6.18. Leading causes of death among children aged 5–14 years, Bangladesh, 2024

Deaths among children aged 5–14 years were mainly due to external causes such as injuries and accidents. Heart diseases, neurological disorders, and pneumonia also contributed notably to mortality. Leukaemia and septicaemia appeared among the top causes, indicating the growing role of chronic and infectious diseases.

The findings underscore the need for injury prevention, infection control, and early diagnosis of chronic illnesses in this age group.

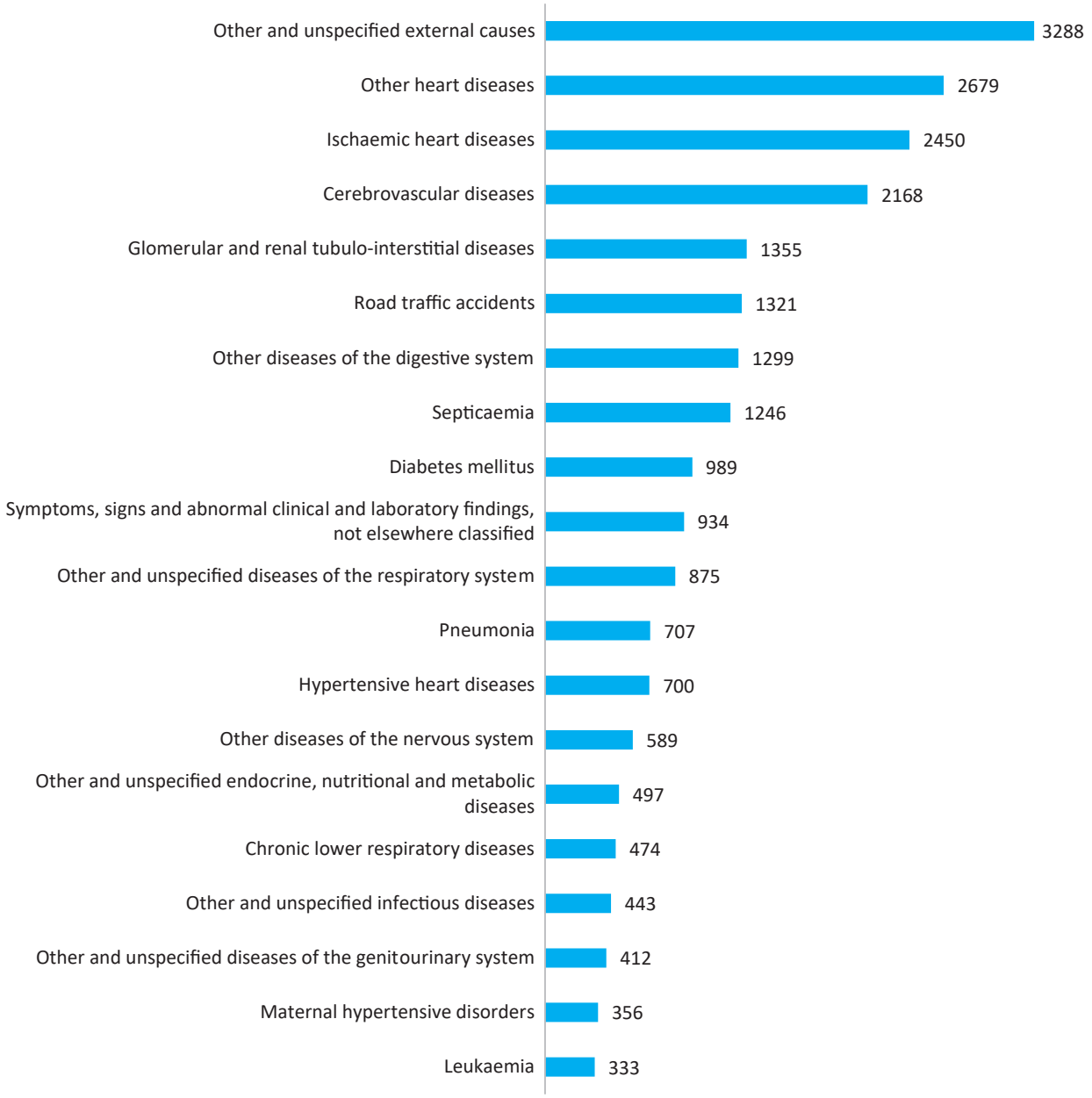

Figure 6.19. Leading causes of death among adults aged 15–44 years, Bangladesh, 2024

Deaths among adults aged 15–44 years were primarily caused by external and injury-related factors, followed by heart diseases and stroke. Renal diseases, septicaemia, and diabetes also contributed notably to premature mortality. The presence of maternal disorders and leukaemia increases health risks for women and young adults. Overall, the data highlight the need for injury prevention, NCD management, and reproductive health interventions in this age group.

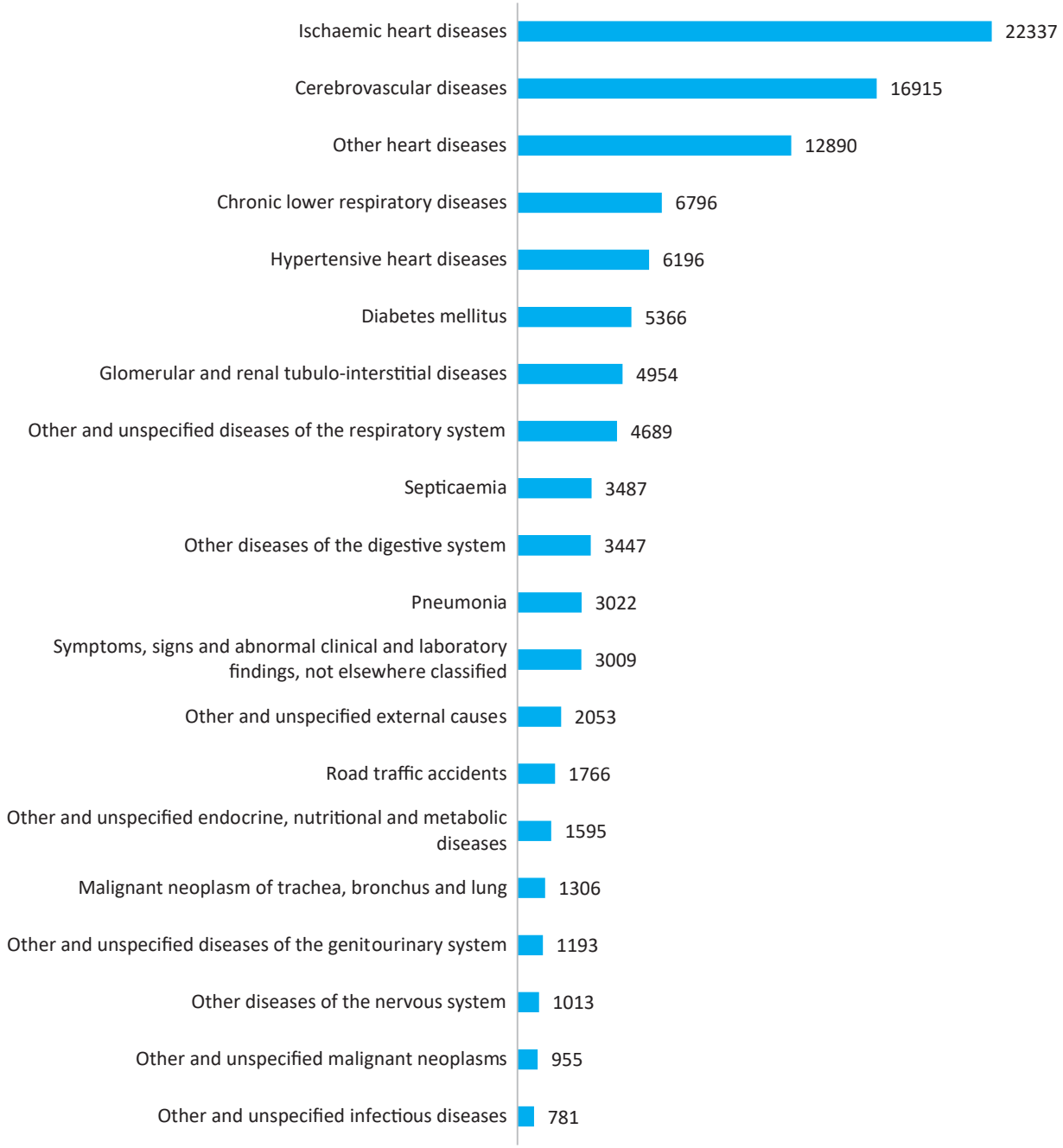

Figure 6.20. Leading causes of death among adults aged 45 years and above, Bangladesh, 2024

Deaths among adults aged 45 years and above were overwhelmingly due to non-communicable diseases. Ischaemic heart disease, stroke, and other heart diseases accounted for the majority of deaths. Chronic conditions such as respiratory disease, hypertension, diabetes, and renal disease also contributed notably. This pattern underscores the country's ageing population and rising NCD burden, demanding stronger chronic disease management and prevention programs.

Table 6.1. Leading causes of community deaths by sex, Bangladesh, 2024 (ICD-10 based, Verbal Autopsy data)

Causes of Death	icd10	Sex		
		Male	Female	Other
Ischemic Heart Disease	I24	4050	1730	4
Stroke	I64	1506	733	
Chronic Respiratory	J44	1545	676	1
Diabetes	E14	641	414	
Pneumonia	J22	330	208	
Road Traffic	V89	288	66	
Prostate Cancer	C61	339		
Chronic Kidney Disease	N18	223	90	
Cirrhosis	K74	224	84	
Lung Cancer	C34	191	17	
Falls	W19	101	65	
Other Non-communicable Diseases	UU1	102	55	
Maternal	O95		97	
TB	A16	56	30	
Esophageal Cancer	C15	62	23	
Leukemia/Lymphomas	C96	50	28	
Breast Cancer	C50		75	
Cervical Cancer	C53		69	
Drowning	W74	52	15	
Suicide	X84	33	25	
Diarrhea/Dysentery	A09	26	23	
Other Injuries	X58	37	8	
Other Cancers	C76	13	27	
Other Infectious Diseases	B99	23	17	
Stomach Cancer	C16	20	9	
Fires	X09	20	8	
Neonatal Pneumonia	P23	16	11	
Homicide	Y09	12	6	
Poisonings	X49	10	3	
Childhood Cancer	C76	8	3	
Bite of Venomous Animal	X27	5	5	
Childhood Cardiovascular Diseases	I99	5	5	
Stillbirth	P95	7	3	

Table 6.1. contd.

Table continued...				
Causes of death	**icd10**	**Sex**		
		Male	**Female**	**Other**
Other defined causes of child deaths	UU2	2	7	
Neonatal Meningitis/Sepsis	P36	4	3	
Preterm Delivery	P07	2	5	
Digestive Diseases	K92	3	3	
Congenital malformation	Q89	3	1	
Birth asphyxia	P21	3		
Hemorrhagic fever	A99	1	1	
Meningitis	G03		2	
Measles	B05	1		
Other Cardiovascular Diseases	I99		1	

Verbal autopsy data from 2024 show that non-communicable diseases—particularly ischaemic heart disease, stroke, and chronic respiratory diseases—were the predominant causes of deaths in the community, especially among males. Maternal causes and female-specific cancers (breast and cervical) accounted for notable proportions of female deaths. Deaths from injuries and external causes such as road traffic accidents, drowning, and suicide were also common among males.
Overall, the findings reflect a dual mortality burden in the community—persistent infectious and maternal causes alongside a growing wave of chronic and injury-related deaths, underscoring the need for integrated primary health and preventive programs.

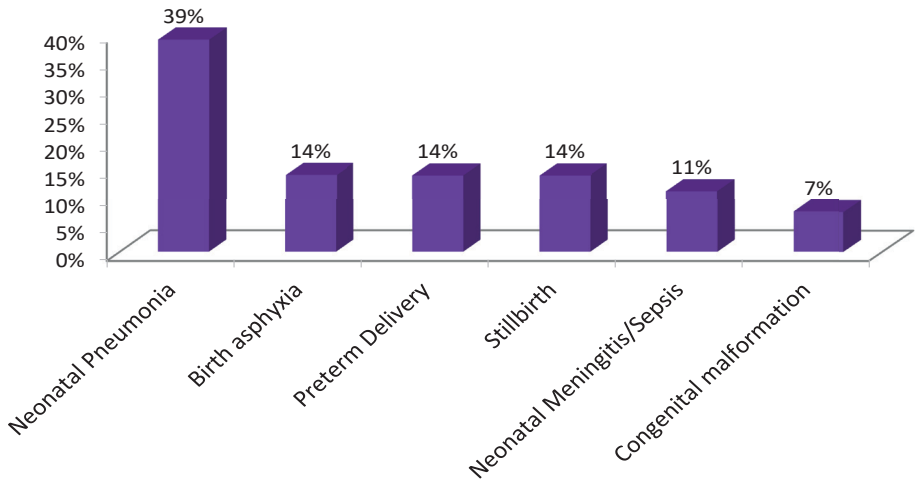

Figure 6.21. Leading causes of Neonatal Deaths (<29 days), Bangladesh, 2024 (ICD-10 based, Verbal Autopsy Data)

Among neonates under 29 days, pneumonia was the leading cause of death, followed by birth asphyxia and preterm delivery. Stillbirths and neonatal sepsis/meningitis also contributed notably to early neonatal mortality. Congenital malformations accounted for a smaller but persistent share of deaths. The pattern underscores the need for improved perinatal care, infection prevention, and neonatal resuscitation at the community level.

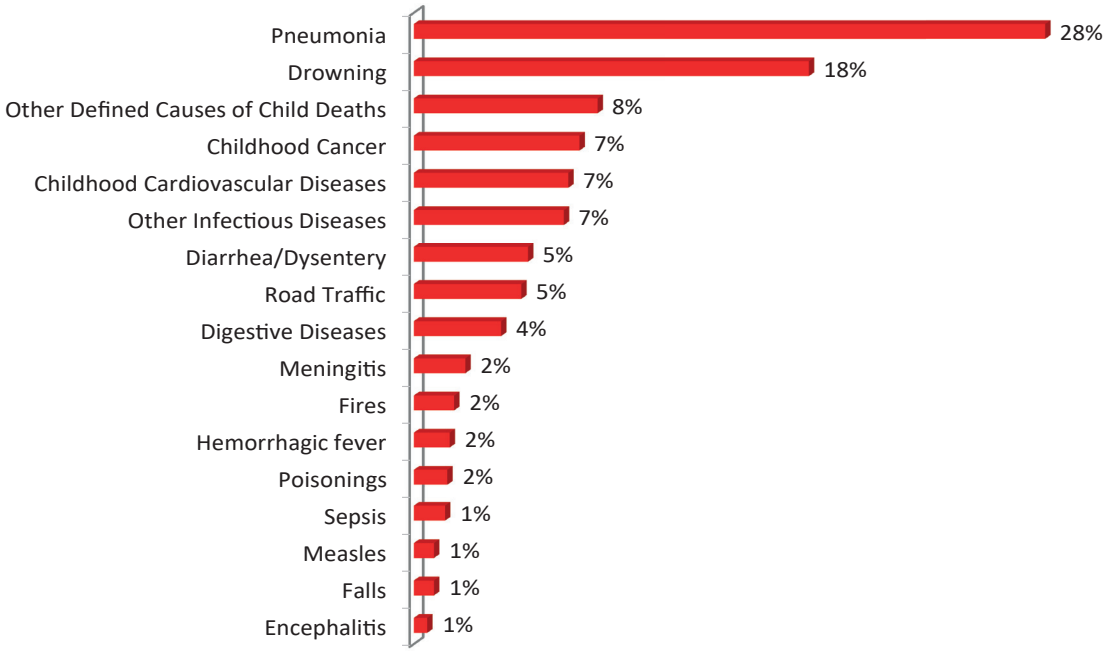

Figure 6.22. Leading causes of death among children aged 29 days to 11 years, Bangladesh, 2024 (ICD-10 based, Verbal Autopsy data)

Among children aged 29 days to 11 years, pneumonia was the dominant cause of death, followed by other defined child death causes and childhood cardiovascular diseases.

Diarrhoea/dysentery, digestive diseases, and injuries such as burns and poisonings also contributed to mortality. Vaccine-preventable diseases like measles and encephalitis appeared in smaller proportions. This highlights the need to strengthen childhood infection control, nutrition, and injury prevention programs at the community level.

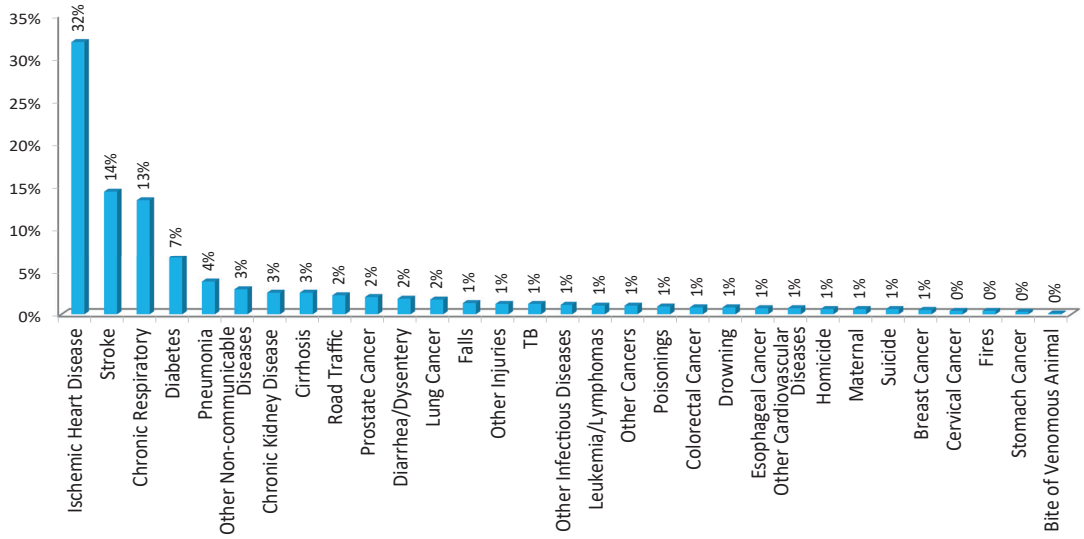

Figure 6.23. Leading causes of death among Individuals aged 12 years and above, Bangladesh, 2024 (ICD-10 based, Verbal Autopsy data)

Among people aged 12 years and above, ischaemic heart disease was the leading cause of death, followed by chronic respiratory disease and pneumonia. Other significant causes included chronic kidney disease, road traffic injuries, and diarrheal diseases. Deaths from tuberculosis, leukaemia/lymphoma, and maternal and breast cancers were also evident. The pattern reflects a high burden of non-communicable and respiratory diseases, with continued risk from injuries and infections in the community.

Interpretations of Key Findings

Hospital data from 2024 provides the most complete record to date, capturing over 94% of inpatient cases from government facilities. Similarly, 176,707 aggregated deaths were reported from government facilities, while 182,735 individual death records were documented, including data from selected private hospitals.

Despite this broad reporting network, data duplication and partial individual submissions persist in some facilities, indicating a need for continued improvement in validation and data completeness. Nevertheless, these datasets provide the most comprehensive picture yet of the national morbidity and mortality situation.

Morbidity data show that respiratory tract infections, diarrheal diseases, and injuries remain the most common causes of hospitalization. Non-communicable diseases—such as hypertension, diabetes, and heart diseases—dominate admissions among adults over 45 years, while obstetric complications and accidental injuries are prominent among younger adults.
For children, pneumonia, diarrhoea, and malnutrition continue to drive hospital admissions, highlighting persistent challenges in infection control and child nutrition.

Mortality data, derived from Medical Certification of Cause of Death (MCCoD) and Verbal Autopsy (VA) systems, indicate that non-communicable diseases are now the leading causes of death nationwide. Ischaemic heart disease and stroke together accounted for the largest proportion of deaths, followed by chronic respiratory diseases, diabetes, and renal disorders.
Among children, low birth weight, birth asphyxia, and pneumonia remain key contributors to mortality, while injuries, drowning, and road traffic accidents represent significant causes of death among younger populations.

Verbal Autopsy data further reveal that community deaths are also dominated by NCDs, especially among males, whereas maternal causes and female-specific cancers (breast and cervical) are notable among females. However, the number of verbal autopsies conducted depends heavily on death registration, which limits coverage in some areas.

Overall, the 2024 findings demonstrate a dual disease burden—a coexistence of infectious and perinatal causes among children and chronic non-communicable diseases among adults and the elderly.

Recommendations

Policy-Level Recommendations

- Integrate all hospitals, public and private, into the national morbidity and mortality reporting system, ensuring complete coverage and standardized ICD-10-based reporting for inpatient, outpatient, and emergency departments.
- Institutionalize MCCoD and Verbal Autopsy (VA) within the national CRVS and health information systems, backed by sustained resources and oversight.
- Establish a unified national data architecture and Health Information Exchange (HIE) to connect all reporting systems under a single, interoperable framework.
- Mandate data sharing across public, private, and NGO facilities through a secure National Shareable Health Record system to reduce duplication and strengthen continuity of information.

Figure 6.24. Md. Saidur Rahman, Secretary of the Health Services Division, during a visit to the National Institute of Traumatology and Orthopaedic Rehabilitation (NITOR) to review the treatment and condition of patients injured in the July 2024 mass uprising.

- Promote evidence-based policy and resource planning by embedding regular use of morbidity and mortality analyses in national and subnational review processes.

Operational-Level Recommendations

- Address data duplication and incomplete reporting through automated validation, unique patient identifiers, and stronger routine supervision.
- Expand Verbal Autopsy coverage by linking it directly with death registration to capture all eligible community deaths.
- Strengthen staff capacity in ICD-10 coding, death certification, and data interpretation through regular refresher training and mentoring.
- Enhance accountability at the facility level by institutionalizing data review meetings and incorporating morbidity and mortality indicators into hospital performance monitoring.
- Conduct regular data quality audits and feedback loops between central MIS and facilities to ensure completeness, accuracy, and timeliness.
- Deploy user-friendly dashboards at the facility level to visualize admissions, deaths, and leading causes, encouraging data-driven management.

Data Use and System Integration

- Link morbidity, mortality, and CRVS datasets into a single National Health Data Repository for comprehensive analysis.
- Operationalize the National Shareable Health Record system to connect inpatient, MCCoD, and VA data—reducing duplication and improving longitudinal tracking.
- Introduce advanced analytics tools for automated validation, coding support, and predictive disease trend analysis.
- Foster a culture of data use at every level—enabling facility managers and clinicians to

apply their own data for planning and service improvement.

- Strengthen intersectoral collaboration among DGHS, DGFP, NIPORT, and the Registrar General's Office to align health, demographic, and CRVS datasets for a complete national mortality profile.

Technical Notes

- **Data Sources:** Morbidity and mortality statistics are derived from DGHS hospital reporting systems. Morbidity data come from inpatient admissions in all government hospitals, while mortality data are obtained through Medical Certification of Cause of Death (MCCoD) for hospital deaths and Verbal Autopsy (VA) for community deaths. Selected private hospitals also contribute MCCoD data.
- **Data Collection:** Aggregated hospital data have been reported online since 2008, and individual patient and death records were introduced in 2017 for detailed ICD-10 coding. MCCoD follows the international death certificate format, while VA uses the SMART VA tool applied in sample upazilas.
- **Compilation and Validation:** Data are compiled nationally through DHIS2, with automated and manual validation to detect duplicates, missing entries, and inconsistencies. Facilities receive feedback to correct discrepancies.
- **Coding Standards:** All diagnoses and causes of death are classified using ICD-10 codes by trained physicians, nurses, and statisticians to ensure comparability across facilities.
- **Limitations:** Some duplication and incomplete individual reporting persist in a few facilities. Private hospital data are partially integrated, and VA coverage depends on death registration completeness.
- **Integration and Use:** Efforts are underway to integrate morbidity and mortality systems with the National Shareable Health Record System, aiming to improve data quality, reduce duplication, and strengthen use of information for planning and policy decisions.

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Health Workforce

Executive Summary

As of 31 December 2024, the Directorate General of Health Services (DGHS) had a total of 122,433 sanctioned positions, of which 79,530 (65%) were filled and 42,903 (35%) remained vacant.

While the overall structure of the workforce has expanded slightly from the previous year, the vacancy rate has increased marginally from 34.3% to 35.0%. Critical shortages remain in Grades 11–20, which include technical, support, and administrative positions vital for health service delivery.

Sustained progress toward Universal Health Coverage (UHC) by 2030 will require strategic investments in equitable recruitment, fair deployment, gender balance, and retention measures that address both professional satisfaction and workplace conditions.

Background and Strategic Objectives

Background

The health workforce remains the foundation of Bangladesh's healthcare delivery system. A resilient and adequately distributed workforce ensures continuity of services and improved health outcomes. According to the Bangladesh Medical and Dental Council (BMDC), the number of registered physicians increased to 156,750 by December 2024, while registered nurses totalled 107,047, indicating continued growth in the professional pool.

However, the doctor-to-population ratio remains below the WHO-recommended threshold of 1.5 physicians per 1,000 population, despite being higher than the South-East Asia regional average. The Government's continued investment in human resources for health reflects its strong commitment to strengthening the system and closing equity gaps.

Strategic Objectives

- Ensure equitable recruitment and deployment across all tiers of the health system, with a focus on addressing geographical and disciplinary imbalances.
- Strengthen gender balance and inclusivity through targeted recruitment, workplace safety measures, and gender-sensitive HR policies.
- Promote career planning and professional growth by defining structured pathways for advancement, transparent promotion ratios, and competency-based progression criteria across all categories.
- Expand opportunities for higher education and super-specialization, aligning postgraduate and fellowship programs with national service priorities and emerging health needs.
- Improve retention and motivation through better work environments, fair remuneration, and recognition mechanisms.
- Enhance coordination among directorates to harmonize human resource planning, training, and deployment under the national UHC roadmap.
- Utilize Human Resource Information System (HRIS) data and analytics for evidence-based decision-making, workforce forecasting, and monitoring of equitable human resource distribution.

Current Status and Trends

DGHS currently maintains 122,433 sanctioned positions, marking a stable capacity compared to the previous year. However, vacancies remain substantial, particularly in field and support staffs.

Table 7.1. Number of sanctioned, filled up and vacant posts under DGHS as per record on 31 December 2024

Category	Total Posts	Filled (Male)	Filled (Female)	Filled Total	Vacant	Rate of vacancy (%)
Grade 9 and bellow						
Doctors	37662	17694	11456	29150	8512	22.6%
Director General	1	1	0	1	0	0.0%
Addl. Director General/ OSD/ Equivalent	13	13	0	13	0	0.0%
Director/ Principal/ Vice Principal/ OSD/ Equivalent	135	164	27	191	-56	-41.5%
Deputy Director/ OSD/ Equivalent	159	271	83	354	-195	-122.6%
Assistant Director/ Civil Surgeon/ OSD/ Equivalent	287	364	79	443	-156	-54.4%
Deputy Civil Surgeon/ UHFPO/ OSD/ Equivalent	1197	2028	906	2934	-1737	-145.1%
Professor	1056	287	104	391	665	63.0%
Associate Professor	1951	894	280	1174	777	39.8%
Assistant Professor	3032	1093	460	1553	1479	48.8%
Senior Consultant	809	244	59	303	506	62.5%
Senior Lecturer	8	6	0	6	2	25.0%
Junior Consultant	5102	1609	808	2417	2685	52.6%
Junior Lecturer	32	14	13	27	5	15.6%
Other posts (pay scale 7 & 8)	577	332	199	531	46	8.0%
Assistant Surgeon/ OSD/ Equivalent	23303	10374	8438	18812	4491	19.3%
Alternate Physician	371	91	51	142	229	61.7%
Non-Doctors	587	175	57	232	355	60.5%
Sub-Total	38620	17960	11564	29524	9096	50.2%
Grade 10*						
Sub-Total	1216	472	80	552	664	50.2%
Grade 11-16						
Sub Asstt. Community Medical Officer	5315	2060	1163	3223	2092	39.4%
Field worker	26546	9998	8061	18059	8487	32.0%
Health Inspector	1411	535	228	763	648	45.9%
Asstt. Health Inspector	4225	1241	1932	3173	1052	24.9%
Health Asstt.	20910	8222	5901	14123	6787	32.5%
Medical technologist	9420	5356	1252	6608	2812	29.9%
Pharmacist	2960	1693	467	2160	800	27.0%
Table 7.1. contd.						

Table continued...						
Category	**Total Posts**	**Filled (Male)**	**Filled (Female)**	**Filled Total**	**Vacant**	**Rate of vacancy (%)**
MT (Dental)	662	445	117	562	100	15.1%
MT (EPI)	512	410	30	440	72	14.1%
MT (Lab)	2624	1568	418	1986	638	24.3%
MT (Physiotherapy)	452	160	52	212	240	53.1%
MT (Radiography)	874	612	45	657	217	24.8%
MT (Radiotherapy)	86	55	15	70	16	18.6%
MT (SI)	484	345	89	434	50	10.3%
MT (Others Dicipline)	49	18	2	20	29	59.2%
MT (without Dicipline)	717	50	17	67	650	90.7%
Others	15177	7115	1480	8595	6582	43.4%
Sub-Total	56458	24529	11956	36485	19973	35.4%
Grade 17 to 20						
Sub-Total	26139	9803	3166	12969	13170	50.4%
Total	**122433**	**52764**	**26766**	**79530**	**42903**	**35.0%**

While medical officer and specialist positions (Grade 1–9) have seen improved filling rates, field workers and technical personnel still show high vacancy ratios. Grades 11-20, representing technologists, administrative, and support staff, remain the most underfilled.

Persistent gender disparities are also noted—though female participation among doctors and field-level workers is increasing, administrative and technical roles continue to be male-dominated. Workforce redistribution, therefore, remains a critical policy focus for equitable service delivery.

Key Indicators

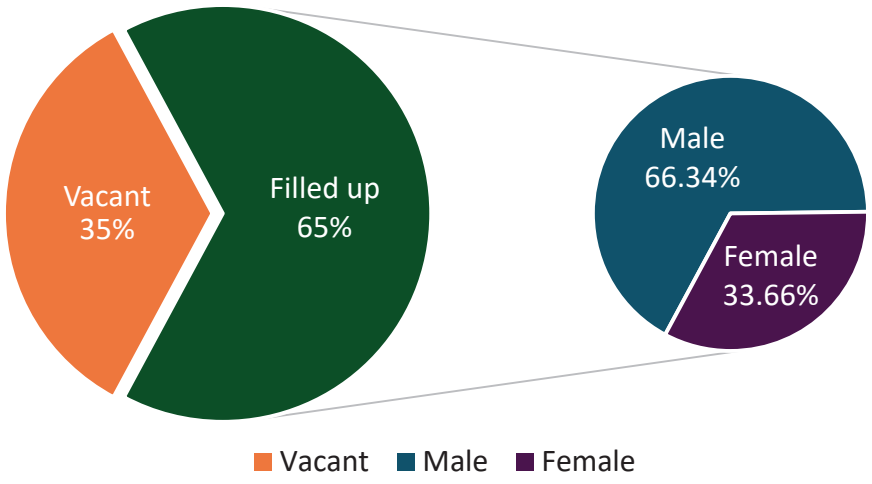

Figure 7.1. Status of the total sanctioned posts under DGHS as per record on 31 December 2024

Out of all sanctioned posts, 65% are filled, while 35% remain vacant, reflecting persistent human resource gaps despite ongoing recruitment efforts. Among the filled positions, male employees constitute 66.34%, and female employees represent 33.66% of the workforce.
This highlights two critical aspects of the health workforce: a considerable proportion of unfilled posts requiring focused recruitment drives, and a continuing gender imbalance, with women occupying roughly one-third of filled positions. Strengthening gender-sensitive recruitment and retention policies is therefore essential to achieving equitable workforce representation across all service levels.

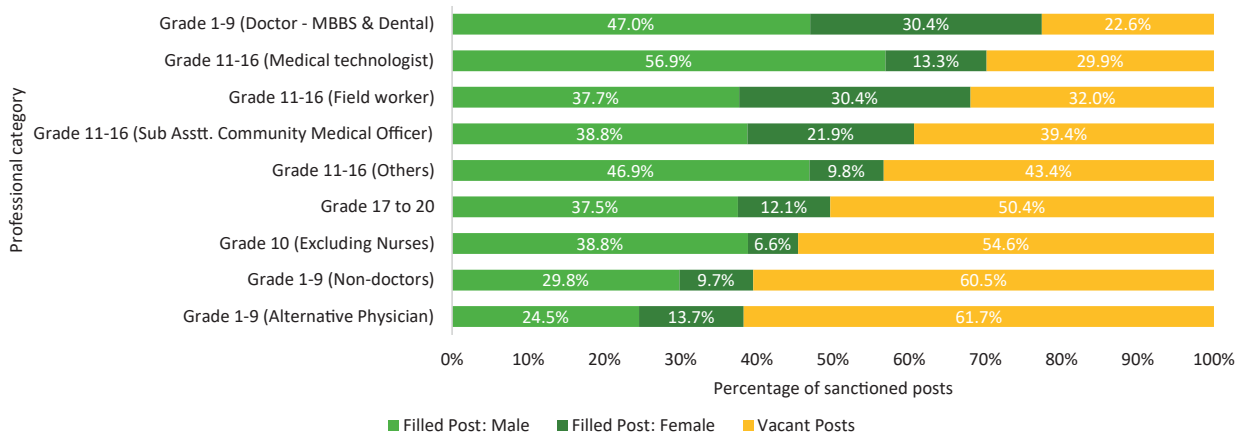

Figure 7.2. Status of filled-up and vacant posts in all categories of employees under DGHS with gender division as per record on 31 December 2024 (Bangladesh SDG Tracker: Indicator 3c.1).

The data show notable variation across categories. Vacancy rates remain lowest among doctors (22.6%), indicating continued progress in physician recruitment, while field workers and mid-level categories (Grades 11–16) still face moderate shortfalls ranging from 29.9% to 43.4%. In contrast, technical and administrative positions under Grade 10 show vacancies exceeding 50%, and alternative physicians exhibit the highest rate at 61.7%, highlighting critical shortages in complementary disciplines.

Gender disaggregation demonstrates that male employees comprise the majority of filled posts, with women representing roughly one-third across most categories. The overall pattern underscores the need for targeted recruitment and equitable deployment strategies, particularly for field-level, technical, and female staff positions, to ensure balanced workforce distribution and sustainable service delivery nationwide.

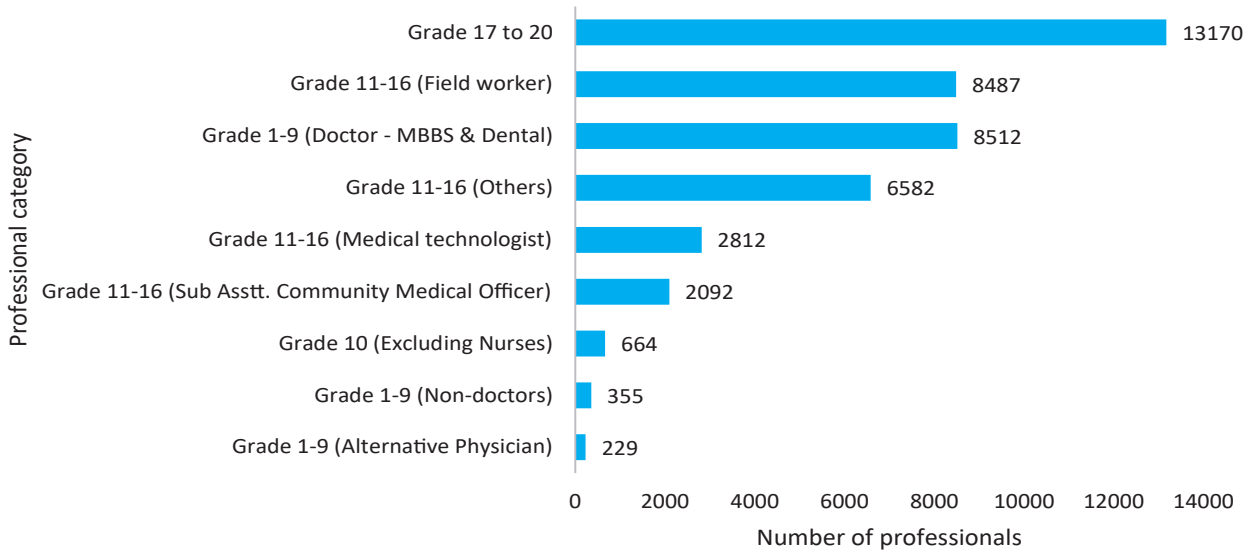

Figure 7.3. Number of professionals needed to be recruited in sanctioned posts under DGHS by category as per record on 31 December 2024

The figure illustrates the number of professionals required to fill vacant sanctioned posts under DGHS as of 31 December 2024. The largest gap is observed in Grades 17–20, with 13,170 positions yet to be filled, representing the most significant shortfall among support and operational staff essential for facility-level service delivery.

Substantial vacancies are also evident among field workers (8,487) and medical officers (8,512) under Grade 1–9, reflecting persistent shortages in both frontline and clinical service provision.

Other critical gaps include 6,582 vacant posts in Grade 11–16 (other mid-level cadres) and 2,812 among medical technologists, which directly affect diagnostic and technical service capacity.

These patterns underscore the urgent need for comprehensive recruitment drives, particularly targeting field and support personnel, alongside strategic workforce planning to ensure equitable staffing across all facility levels and programmatic functions.

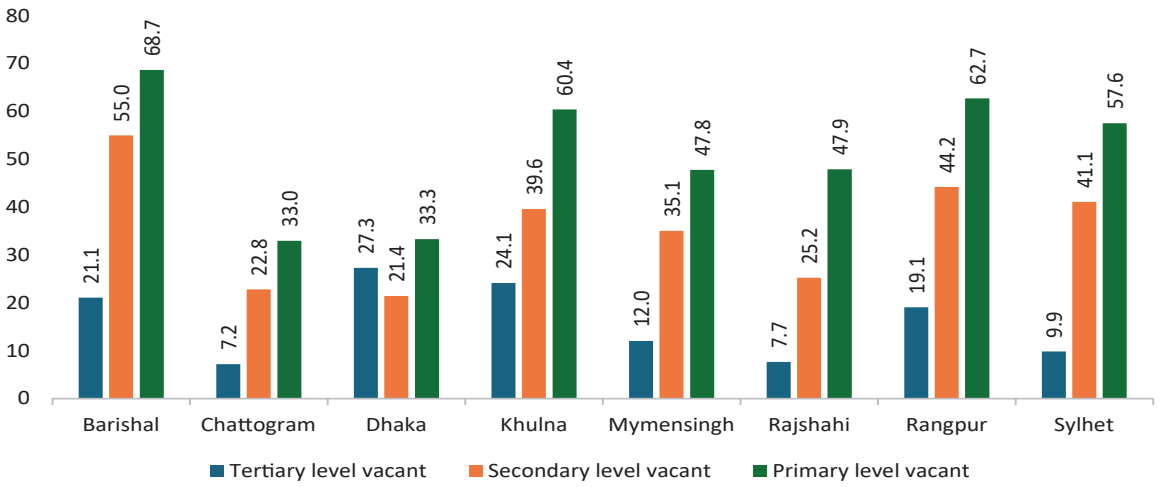

Figure 7.4. Regional comparison of physician vacancies in different health facility levels

Vacancy rates among physicians in Bangladesh show a clear imbalance across service tiers — the lower the facility level, the higher the shortage.

- Tertiary level: Average vacancy ~16%, relatively better staffed, though Dhaka (27.3%) and Khulna (24.1%) show notable shortages.
- Secondary level: Average vacancy ~36%, mid-tier hospitals are moderately affected, with Barishal (55%) and Rangpur (44.2%) being most strained.
- Primary level: Average vacancy ~51%, extremely high across divisions, with Barishal (68.7%), Rangpur (62.7%), and Khulna (60.4%) facing critical shortages.

Regional disparities are evident:

- Dhaka and Chattogram are better due to urban concentration.
- Barishal, Rangpur, Khulna, and Sylhet have severe gaps, particularly in primary healthcare.

Key Findings

- The overall vacancy rate of 35% underscores ongoing challenges in recruitment and retention.
- Technical and support staff shortages (Grades 11-20) critically affect facility operations.
- Health Assistants, Sub Assistant Community Medical officers (SACMOs), and Technologists, remain underfilled, weakening community-level service delivery.
- Gender disparity persists, particularly in non-medical and managerial posts.
- Certain leadership categories show overfilled sanctioned posts, suggesting structural imbalances requiring rationalization.
- Workforce dynamics, retirement, transfer, resignation, and migration, continue to affect overall staffing stability.
- Physician vacancies in Bangladesh reveal a severe urban–rural imbalance, with primary-level facilities experiencing over 50% vacancy in most divisions, while tertiary hospitals remain relatively well-staffed.

Program Implementation Highlights

- Ongoing recruitment drives are in progress to fill vacant posts across all categories, prioritizing field-level and technical positions to strengthen service delivery at the community level.
- Promotional activities are actively being expedited to address long-standing backlogs and ensure timely career progression for eligible officers.
- Efforts are underway to establish standard setups for all tiers of the health system and to initiate post creation according to the approved standards, ensuring structural uniformity across facilities.
- The recruitment of 4,000 physicians is currently under process to meet growing service demands and improve physician-to-population ratios.
- A comprehensive career planning framework is under development to define promotion ratios, learning opportunities, and pathways for higher education and super-specialization.
- Efficient HR distribution through HRIS has been implemented, allowing real-time tracking of sanctioned, filled, and vacant posts and facilitating evidence-based deployment decisions.
- The HRIS continues to serve as the backbone of data-driven policy and decision-making, supporting strategic workforce management and forecasting at DGHS.

Recommendations

Policy Recommendations

1. Formulate a comprehensive National Human Resources for Health (HRH) Policy that

incorporates standardized setups, sanctioned post structures, and defined staffing norms across all tiers of healthcare facilities.

2. Establish a structured career planning and promotion framework that defines promotion ratios, competency-based advancement, and transparent criteria for all categories.
3. Expand opportunities for higher education, specialization, and super-specialization to ensure the skill mix aligns with emerging health priorities and technological advancements.
4. Institutionalize retention and incentive policies, including hardship allowances, housing, and family-support schemes, for staff serving in rural, hard-to-reach, and emergency-prone areas.
5. Adopt gender-responsive and inclusive HR policies to promote equitable participation and leadership opportunities for women and underrepresented groups.
6. Strengthen inter-directorate coordination among DGHS, DGNM, DGFP, and other health-related directorates to ensure unified planning, deployment, and training strategies.
7. Mandate HRIS as the national standard platform for real-time workforce tracking, data-driven policymaking, and predictive modelling of HR requirements.
8. Ensure sustainable financing and governance mechanisms for HRH management to enable continuous recruitment, training, and data system maintenance.

Operational Recommendations

1. Accelerate recruitment to fill 42,903 existing vacancies, prioritizing Grades 11–20 and ensuring transparent and merit-based selection processes.
2. Continue the ongoing recruitment of 4,000 physicians and expand this initiative to other critical technical and support categories based on HRIS-driven vacancy analytics.
3. Reduce promotion backlogs through a time-bound clearance mechanism and integrate automated eligibility tracking within HRIS to ensure timely career progression.
4. Implement standardized staffing setups at all facility levels and initiate post creation according to approved structures to balance workloads and service coverage.
5. Enhance training capacity for mid-level staffs (SACMOs, Health Inspectors, Technologists, and Pharmacists) through partnerships with academic and training institutions.
6. Deploy staff efficiently using real-time HRIS data, ensuring equitable geographical distribution and minimizing overstaffing in managerial tiers.
7. Introduce continuous professional development (CPD) and competency-based evaluation systems to improve service quality and workforce motivation.
8. Expand HRIS functionalities to integrate API connectivity with BMDC, BCPS, BMU, and IBAS to automate HR management processes and reduce human dependency in data updating and quality control.
9. Introduce a GIS-based multidimensional HR dashboard for policymakers, integrating spatial and performance data to visualize workforce distribution, identify regional disparities, and support evidence-driven policy and resource allocation decisions.
10. Strengthen collaboration with the Ministry of Public Administration and Finance Division to synchronize recruitment cycles and funding allocations for new post creation.

Technical Notes

- Data are based on the HRIS, MIS, DGHS, as of 31 December 2024.

- Nursing and midwifery positions are managed separately under DGNM and thus excluded here.
- Data reflect sanctioned, filled, and vacant posts, disaggregated by gender.
- Vacancy percentages may fluctuate with ongoing recruitment, transfers, and retirements.

References

1. HRIS, MIS-DGHS, 2024.
2. BMDC Registration Database, December 2024.
3. Bangladesh Sample Vital Statistics, 2024.
4. Bangladesh SDG Tracker.
5. WHO Human Resources for Health, 2015.
6. BMRC Bulletin, 2023.
7. PLOS ONE, 2023.
8. Global Health Symposium, 2010.
9. Bulletin of the World Health Organization, 2020.

Medical Education

Executive Summary

In 2024, the Directorate General of Medical Education (DGME) oversees a comprehensive medical education network of 104 medical colleges (37 public, 67 private), 5 medical universities, and 39 postgraduate institutes serving 13,993 students nationwide. The sector demonstrates remarkable expansion with 345 new institutions established since 2009, representing a 240% growth from 144 to 489 total institutions.

Competency-based curriculum reform was successfully implemented across all 104 medical colleges, emphasizing clinical skills, critical thinking, and professionalism. Faculty development reached 1,480 professionals through training programs on modern teaching methodologies, assessment techniques, and leadership. Infrastructure modernization progressed with 16 simulation labs established and 2 additional labs under development, providing hands-on clinical training in controlled environments.

Research capacity strengthened through 31 funded projects focusing on medical education, public health, and teaching methodology, while quality assurance efforts included accreditation assessments of 37 medical colleges. Female enrollment continues increasing, reflecting successful gender equity initiatives. Faculty shortages persist in basic sciences including forensic medicine and anatomy.

Moving forward, priorities include addressing faculty recruitment challenges, expanding postgraduate training capacity, strengthening research culture alignment with population health needs, and ensuring adequate technology infrastructure investment across all institutions for enhanced teaching and learning quality.

Background and Strategic Objectives

Background

The Directorate General of Medical Education (DGME) functions as the apex regulatory and oversight body for medical and dental education in Bangladesh, encompassing undergraduate training, postgraduate specialization, and academic quality assurance across public medical institutions. Established to ensure systematic development of healthcare human resources, DGME bridges academic excellence with public health policy implementation while maintaining educational standards aligned with national health priorities.

DGME's mandate encompasses comprehensive oversight of medical education infrastructure including 104 medical colleges, 5 medical universities, 39 postgraduate institutes, 220 medical assistant training schools, and 120 institutes of health technology. The directorate coordinates with the Bangladesh Medical and Dental Council (BMDC) for professional registration and quality standards while maintaining strategic partnerships for curriculum development, faculty training, and international collaboration.

Strategic Objectives

Quality Medical Education and Human Resource Development:

- Strengthen supervision and quality assurance activities across all medical educational institutions ensuring adherence to national and international standards
- Produce competent, skilled healthcare professionals through evidence-based curriculum development and modern teaching methodologies

- Formulate and update laws, regulations, policies, strategies, and curricula related to medical education aligned with evolving healthcare needs

Infrastructure and Technology Enhancement:

- Develop and expand physical infrastructure of health professional educational institutions including modern teaching facilities, laboratories, and clinical training centers
- Increase medical education opportunities through establishment of digital libraries, e-learning platforms, and simulation-based learning environments
- Promote effective technology integration in medical education through faculty training and infrastructure development

Current Status and Trends

Institutional Growth and Infrastructure Development

Bangladesh's medical education sector experienced unprecedented expansion with total institutions growing from 144 in 2009 to 489 in 2024, representing 345 new institutions (240% increase). Government medical colleges doubled from 17 to 37, while private medical colleges increased from 40 to 67, demonstrating balanced public-private sector growth addressing increasing healthcare workforce demands.

Table 8.1. Medical Education Institution Growth (2009-2024)

Institution Type	2009	2024	Growth	Enrollment Capacity
Government Medical Colleges	17	37	+20	5,380 seats
Private Medical Colleges	40	67	+27	6,293 seats
Medical Universities	1	5	+4	-
Armed Forces Medical Colleges	1	6	+5	385 seats
Postgraduate Institutes	-	39	-	2,272 seats
Total Medical/Dental Institutions	58	117	+59	13,973 seats

Human Resource Development and Registration Trends Bangladesh maintains 136,760 registered MBBS doctors (74,888 male, 61,872 female) and 14,310 registered BDS doctors (7,113 male, 7,197 female) through the BMDC registry. Notably, female representation shows progressive improvement with dental graduates achieving gender parity (50.3% female) while postgraduate programs include 8,782 female doctors among 22,460 total specialists, indicating continued gender equity advancement in medical education.

Curriculum Reform and Quality Enhancement

Competency-Based Education Implementation All 104 medical colleges successfully implemented comprehensive curriculum reform emphasizing competency-based medical education, clinical skills development, critical thinking abilities, and professional behavior standards. This transformation shifts traditional knowledge-based learning toward practical competency development, case-based learning methodologies, and problem-solving approaches aligned with global medical education standards.

Faculty Development and Professional Enhancement The sector trained 1,480 faculty members through comprehensive programs covering basic concepts of teaching-learning, modern assessment methodologies, educational

leadership, and management skills. Despite these achievements, critical faculty shortages persist in basic sciences departments, particularly forensic medicine and anatomy, necessitating targeted recruitment and retention strategies.

Research and Innovation Culture Research capacity expanded through 31 funded projects addressing medical education improvement, public health challenges, and innovative teaching methodologies. While research publication numbers increase, focus areas require better alignment with national health priorities and population-specific health challenges to maximize societal impact and policy relevance.

Program Implementation Highlights

Educational Excellence and Curriculum Innovation

- **Competency-Based Curriculum Implementation:** Successfully deployed modern curriculum across 104 medical colleges emphasizing clinical competence, critical thinking, professionalism, and evidence-based practice aligned with global medical education standards
- **Simulation-Based Learning Expansion:** Established 16 simulation laboratories in medical and dental colleges with 2 additional facilities under development, providing safe, controlled environments for clinical skill development and procedural training
- **Faculty Development Programs:** Trained 1,480 faculty members in contemporary teaching methodologies, assessment techniques, leadership development, and educational management enhancing institutional capacity for quality education delivery
- **E-Learning Platform Integration:** Launched comprehensive digital learning systems providing students and faculty access to online resources, interactive modules, virtual classrooms, and digital libraries supporting flexible, accessible education

Quality Assurance and Accreditation Systems

- **Institutional Accreditation:** Conducted comprehensive accreditation assessments of 37 medical colleges ensuring compliance with quality standards, regulatory requirements, and best practice implementation across educational and clinical components
- **Technology Infrastructure Development:** Enhanced institutional capacity through improved internet connectivity, modern teaching aids, digital laboratories, and multimedia resources supporting contemporary medical education delivery
- **Research Grant Program:** Awarded funding to 31 research projects focusing on medical education innovation, public health applications, and teaching methodology improvement fostering institutional research culture development
- **Quality Monitoring Systems:** Implemented systematic monitoring mechanisms for Institutes of Health Technology and Medical Assistant Training Schools ensuring adherence to policies, guidelines, and educational standards

Recommendations

Policy Recommendations

- **Faculty Recruitment Strategy:** Develop comprehensive faculty attraction and retention programs addressing critical shortages in basic sciences through competitive compensation, career development opportunities, and research support mechanisms
- **Curriculum Modernization:** Continuously update medical curricula incorporating latest advances in medical science, technology

integration, problem-based learning, and community-based education aligned with evolving healthcare sector needs

- **Research Infrastructure Development:** Establish a dedicated Medical Research Institute supporting institutional research capacity, funding mechanisms, and innovation in healthcare addressing national health priorities

Operational Improvements

- **Infrastructure Enhancement:** Improve physical infrastructure and provide adequate resources including modern teaching facilities, simulation labs, digital libraries, and reliable internet connectivity across all medical education institutions
- **Technology Integration Advancement:** Promote effective technology utilization through comprehensive faculty and student training, high-quality e-learning resource development, and reliable technology infrastructure ensuring educational quality enhancement
- **Quality Assurance Strengthening:** Implement regular accreditation assessments, continuous quality improvement support, and performance monitoring ensuring all institutions meet excellence standards and regulatory compliance

Resource and Capacity Requirements

- **Sustainable Funding Mechanisms:** Advocate for increased government funding and diversified resource mobilization supporting infrastructure development, faculty recruitment, research activities, and technology advancement
- **Governance Enhancement:** Strengthen institutional governance through leadership development programs, improved resource allocation systems, and accountability mechanisms promoting effective educational management
- **International Collaboration:** Develop partnerships with global medical education institutions for faculty exchange, curriculum development, research collaboration, and best practice sharing supporting continuous improvement and innovation

Technical Notes

Data Sources:

- Bangladesh Medical and Dental Council (BMDC) registration database
- Directorate General of Medical Education (DGME) institutional records
- Human Resource Information System (HRIS) DGHS
- State Faculty of Medical Education monitoring reports

References

National Policy and Regulatory Documents

1. National Health Policy Bangladesh
2. Bangladesh Medical and Dental Council Regulatory Framework
3. Quality Assurance Standards for Medical Education

International Guidelines and Standards 4. World Health Organization Medical Education Guidelines 5. World Federation for Medical Education Global Standards 6. International Medical Education Standards and Best Practices

Institutional and Program Documentation 7. DGME Annual Reports and Strategic Plans 8. Medical College Accreditation Reports 9. Faculty Development Program Evaluation Studies

Research and Planning

Executive Summary

Research and planning functions are fundamental to the development of evidence-based health policy in Bangladesh. The Planning and Research (P&R) Wing of the Directorate General of Health Services (DGHS) and the Bangladesh Medical Research Council (BMRC) play complementary roles in strengthening the national health research system and translating evidence into programmatic action.

The P&R Wing of DGHS contributes to national health advancement through strategic planning, capacity building, evidence-based policymaking, development project management, and coordination of health-related research. Its activities directly support national health priorities and the Sustainable Development Goals (SDGs). Recent achievements include:

- Implementation of 14 development projects
- Streamlining of Institutional Review Board (IRB) processes (5 research proposals approved)
- Expansion of data analytics capabilities through the Data Analysis and Program Support Unit (DAPSU)
- Establishment of the Research and Publication Coordination Cell (RPCC)

The BMRC, established in 1972, serves as Bangladesh's premier body for coordinating biomedical and health research. Its accomplishments include:

- Acceleration of ethical review processes during COVID-19
- Expansion of the National Research Ethics Committee (NREC)
- Establishment of eight research cells in medical colleges
- Delivery of 147 training programs for 2,568 participants
- Maintenance of a research database with over 5,000 abstracts

This chapter examines the institutional roles, achievements, and strategies of both P&R and BMRC, highlighting their coordinated efforts in advancing health research and planning under the Ministry of Health and Family Welfare (MoHFW).

Planning and Research (P&R), Directorate General of Health Services

Institutional Overview

The P&R Wing serves as a vital unit within DGHS, bridging health policy formulation, strategic planning, and research implementation. It coordinates development initiatives, provides oversight for institutional research, and ensures integration of interventions into the national health system.

Its mandate includes:

- Designing and proposing new health sector projects
- Coordinating with stakeholders
- Supporting institutional research
- Ensuring efficient and evidence-driven project implementation

Strategic Objectives

- Planning and proposing new development and technical projects initiatives within the health sector.
- Designing and overseeing sectoral programs, particularly those that align with government health policies and initiatives.

- Coordinating with various government and non-government stakeholders to effectively implement health strategies.
- Providing oversight and support for institutional research initiatives in government health facilities.
- The department ensures that all development interventions are integrated into the broader health system, maximizing efficiency, minimizing duplication, and promoting sustainable outcomes.

Current Status and Trends

Key Performance Indicators

Planning & research demonstrate significant operational achievements:

- 14 development projects implemented
- 5 research proposals approved through IRB
- DAPSU established for data analytics
- RPCC operational for research coordination
- Strengthened procurement and DPP capacity

Note: Detailed performance metrics are available in Annex D.

Recent Developments and Trends

Strategic and Operational Planning

The department is a key stakeholder in preparing, formulating, and reviewing project-related documents in consultation with relevant stakeholders. A Development Project Proposal Cell (DPP Cell) is functioning under this wing, which is responsible for formulating:

- Development Project Proposals (DPP)
- Technical Assistance Project Proposals (TAPP)
- Technical Project Proposals (TPP),
- Preliminary Development Project Proposal (PDPP)
- Project Implementation Plan (PIP)

The P&R wing is actively involved in proposing strategic planning initiatives within the health system, such as revising the career plan and formulating and revising various national guidelines. This proactive approach ensures that the health system is constantly evolving and improving.

The wing is also responsible for reviewing development proposals with strategic priorities and determining whether they are feasible for implementation (feasibility studies). The team actively participates in identifying bottlenecks in ongoing projects, facilitating mid-term revisions (RDPP/RPIP), and ensuring that projects progress according to the approved, time-bound plans. Additionally, activities for the project include time extension, funding, and facilitating the development of the Project Completion Report (PCR).

Data Analytics

The department utilizes data analytics to promote data-driven decision-making throughout the health sector. Activities are ongoing to establish a Data Analytics and Policy Support Unit (DAPSU) within the department, in collaboration with the Management Information System (MIS). The P&R expanding DAPSU capabilities to provide real-time data analytics, dashboards for project monitoring, and evidence-based decision support for health programs.

Research and research Governance

Health research under the DGHS encompasses a wide range of topics, including public health-related research, epidemiological and operational studies, and evidence-based policy research. The key functions include:

- Supervising and supporting health research projects conducted by national and international organizations within government health facilities.
- Facilitating collaboration among governmental entities, research institutions, and academic bodies.

- Reviewing and developing memoranda of understanding (MoUs), strategic documents (Including Country position papers, talking points, and inputs for discussion), guidelines, and standard operating procedures (SOPs).
- Assessing research proposals to ensure scientific rigor and policy relevance.
- The Institutional Review Board (IRB) of DGHS, established in 2022, plays a pivotal role in ensuring the governance of health research. To date, five research proposals have been approved by the IRB of DGHS. Following the Student-led Anti-discriminatory movement in July 2024, reform of the IRB is underway to strengthen its governance further. The formulation of the 'IRB Guideline' is also in progress, underscoring our commitment to robust research governance.

Research to Policy Communication Cell (RPCC)

Within DGHS, the RPCC serves as a vital communication bridge between the research community and policymakers. It is an online portal and repository for high-quality health research evidence, established with the support of the Wellcome Trust and the WHO, to support evidence-informed health policymaking in Bangladesh. The RPCC's role is instrumental in ensuring that health policies are based on the best available evidence, instilling confidence in our policymaking process.

Capacity Building

The Research & Planning wing of DGHS also focuses on developing the capacity of health personnel at various stages of the health system, including planning, administration, financial management, monitoring, supervision, and coordination, to implement project and sectoral activities effectively. Leadership training for health managers from various levels, in collaboration with national and international organizations, is a signature activity of theirs.

Monitoring and Evaluation

Regular field visits and progress assessments ensure accountability and transparency in project implementation.

Procurement

The Procurement Cell supports compliance with national procurement regulations and assists with DPP-related procurement plans.

Partnerships and Collaboration

P&R collaborates with development partners (UNICEF, WHO, IsDB, Bloomberg, CDC, etc.) to strengthen project implementation, research, and capacity building.

Digital Transformation

The P&R expanded DAPSU capabilities to provide real-time data analytics, dashboards for project monitoring, and evidence-based decision support for health programs.

COVID-19 Response and Pandemic Preparedness

The P&R adapted development projects to pandemic needs, supported emergency planning, and maintained critical health system functions. Both organizations now prioritize pandemic preparedness, vaccine development research, and health system resilience.

Institutional Strengthening

The P&R established RPCC to coordinate research activities, strengthened procurement capacity to reduce project delays, and enhanced financial management systems. This unit improved coordination with the Ministry of Health and integration with national health programs.

Key Findings

Research Evidence Generated

BMRC-supported research has produced significant findings in priority health areas. Studies

on non-communicable disease management have informed national diabetes and cancer screening protocols. Nutrition research has contributed to anthropometric indicator monitoring and intervention design. Diagnostic imaging research has advanced radiological capabilities in public facilities. The BMRC Bulletin, a peer-reviewed journal with an h-index of 22, disseminates findings across global health, maternal and child health, and infectious diseases.

The P&R facilitates operational research through DGHS facilities, generating evidence on program implementation effectiveness, service delivery models, and system performance. Research findings directly inform strategic planning, project design, and policy adjustments.

System Improvements

Coordinated efforts have strengthened research and planning systems:

- Streamlined IRB processes reduce approval times while maintaining ethical standards
- Research cells in medical colleges build institutional capacity and expand research networks
- Integrated data systems enable evidence-based monitoring and decision-making
- Training programs have developed a cadre of researchers skilled in methodology, ethics, and project management
- Development project implementation demonstrates effective coordination between research and operational functions

The National Health Research Strategy, developed by BMRC with P&R input, provides a coordinated framework for research priorities, funding allocation, and capacity development aligned with health sector goals.

Implementation Highlights

- Developed and reviewed Development Project Proposals (DPPs), TAPPs, and TPPs.
- Facilitate ongoing project evaluations and necessary revisions to address implementation bottlenecks and ensure effective project management. Streamlining 14 development projects under health sector.

1. Establishment of Gopalganj Dental College and Hospital (1st Revised), Gopalganj
2. Establishment of Jamalpur Medical College, Hospital, and Nursing College, Jamalpur
3. Establishment of Patuakhali Medical College and Hospital, Patuakhali
4. Child and Maternal Health and Health System Development – Component 2: Modernization of Diagnostic Imaging Systems in Medical Colleges and Hospitals across 8 Divisions
5. Expansion of National Institute of Neurosciences and Hospital – 1st Revised Project
6. Establishment of 500-Bedded Hospitals and Ancillary Buildings in Jessore, Cox's Bazar, and Pabna under Modern Hospital Project
7. Establishment of Sunamganj Medical College and Hospital, Sunamganj
8. Establishment of 100-Bedded Comprehensive Cancer Treatment Centers in Government Medical College Hospitals in Divisional Cities
9. Upgradation of Existing Kidney Dialysis Centers in Medical Colleges to 50 Beds and Establishment of 10-Bed Dialysis Centers in District Hospitals
10. COVID-19 Emergency Response and Pandemic Preparedness Project – Completed
11. Establishment of Burn and Plastic Surgery Units in Five Medical College Hospitals (Sylhet, Barisal, Rangpur, Rajshahi, and Faridpur)
12. Hospital-Based Medical Waste Management in 15 Government Hospitals
13. Inclusive Services and Opportunities for Host and Forcibly Displaced Myanmar Nationals (FDMN) Communities

14. China-Aid Project for Burn Unit at Chittagong Medical College Hospital in Bangladesh.

- "Rangamati Medical College and Hospital and Nursing college" project approval process is ongoing.
- A number of Preliminary development project proposals have been developed for health related development projects.
- Streamlined the Institutional Review Board (IRB) process to strengthen research governance across health institutions.
- Revised IRB committee and guidelines.
- Conducted capacity-building activities focused on planning, project management, procurement, and monitoring.
- Established Procurement and DPP Cells for streamlined project execution.
- Strengthened partnerships with global health organizations and academic institutions for technical collaboration and capacity development.
- Enhance internal capacities in project evaluation, procurement, monitoring, and impact assessment.
- 2nd Joint External Evaluation on IHR Core Capacities: The 2nd Joint External Evaluation (JEE) of Bangladesh's core capacities under the International Health Regulations (IHR) 2005 was successfully conducted from 7–11 July 2024. The evaluation saw active participation from all relevant stakeholders and was carried out with technical support from the World Health Organization (WHO). The final report of JEE 2024 has been prepared and is awaiting online publication by WHO.
- The P&R (Planning and Reporting) unit collaborates with UNICEF to advance a Healthy Environment for Healthy Children, supporting actions and training health workers to address environmental threats affecting child health, such as pollution and climate change.
- It assists with the creation and review of strategic documents for WASH (Water, Sanitation, and Hygiene), contributing technical input to UNICEF's frameworks for climate-resilient development and evidence-based management in WASH programs.
- The unit actively participates in Strategic Leadership Training with UNICEF, promoting effective, adaptive, and transformational leadership styles among managers to improve organizational results for children globally.
- Guideline on Heavy Metal poisoning, National guideline on heat related illness, has been done with technical support from UNICEF
- Capacity Building, facilitate the IRB procedures, research capacity developments, operational activities, SDG framework and several activities etc was done through WHO Biennium.
- With Collaboration Bloomberg Data for health initiative, Activities to establish Data analytics and policy support Unit has been initiated.
- With support from the US CDC, DGHS initiated a program with Jhpiego Bangladesh, and Association for Public Health Laboratories (APHL),and iss implementing a project titled "Mapping of the Surveillance System and Public Health Laboratories in Bangladesh."
- With funding from the Islamic Development Bank (IsDB) and in collaboration with Friendship, the process of establishing five medical mobile units in remote regions of Bangladesh has been taken.
- Nominations: has nominated officials to participate in various international programs, including both in-person and virtual formats. Several officials have been selected for overseas events, while others have been nominated for virtual programs. Additionally, several individuals have been designated as focal points for specific activities.

Bangladesh Medical Research Council, BMRC

Institutional Overview

The council evolved from addressing post-independence health challenges to become the central institution for developing national research priorities, ensuring ethical standards through the National Research Ethics Committee, building research capacity, disseminating findings, and promoting national and international collaboration. BMRC's creation established one of the country's earliest institutions for bioethics and research governance, contributing significantly to maternal and child health, infectious diseases, nutrition, and non-communicable disease research.

Strategic Objectives

The Bangladesh Medical Research Council (BMRC) operates with a strategic focus on strengthening the national health research system to support evidence-based policy, improved healthcare delivery, and public health outcomes. Its strategic objectives are aligned with both national health priorities and international health development goals.

a. Strengthen National Health Research Capacity

b. Promote Ethical and Quality Research

c. Define and Promote National Research Priorities

d. Facilitate Evidence-Based Health Policy and Practice

e. Foster Multi-sectoral and International Collaboration

f. Ensure Efficient Research Governance and Monitoring

g. Promote Knowledge Dissemination and Publication

h. Support Innovation and Response to Emerging Health Challenges

BMRC Key Achievements

- 147 training programs delivered
- 2,568 participants trained
- 8 research cells established in medical colleges
- 5,000+ research abstracts in database
- NREC expanded and standardized

Current Status and Trends

The Bangladesh Medical Research Council (BMRC) remains a central authority in the health research landscape of Bangladesh, with a growing role in aligning research activities with national and global health priorities. As of 2025, BMRC has made significant progress in research governance, ethics oversight, capacity building, and collaboration, while also adapting to emerging public health challenges.

Institutional Strengthening and Governance

- BMRC has modernized its administrative structure, introducing digital systems for research proposal submission, tracking, and ethical clearance.
- The National Research Ethics Committee (NREC) has expanded its scope, and institutional ethics committees across universities and hospitals are increasingly being supported and standardized by BMRC.
- Improved coordination with the Ministry of Health and Family Welfare and integration with national health programs has enhanced its policy influence

Research Funding and Priority Setting

- BMRC continues to fund competitive research grants, with priority areas such as:
    - □ Non-communicable diseases (e.g., diabetes, cancer)
    - □ Maternal and child health

- Nutrition and food safety
- Mental health
- Antimicrobial resistance (AMR)
- Health impacts of climate change

- There is growing emphasis on operational research to improve the effectiveness of health service delivery.

Response to Emerging Health Threats

- During the COVID-19 pandemic, BMRC played a key role in:
  - Accelerating ethical review of clinical trials and surveillance studies
  - Facilitating data sharing and evidence dissemination
  - Coordinating national research responses in collaboration with DGHS and ICDDR,B
- BMRC is now proactively supporting research on pandemic preparedness, vaccine development, and resilient health systems.

Digital Transformation and Knowledge Management

- BMRC has launched an online portal for ethics approval and research grant applications, improving transparency and efficiency.
- A centralized health research database is under development to track and monitor national health research activities and avoid duplication.
- Plans are underway to launch digital repositories of completed research and promote open access publications.

Capacity Building and Human Resource Development

- BMRC regularly organizes training programs, workshops, and scientific writing courses for researchers, students, and IRB members.
- Collaborations with academic institutions help integrate research ethics and methodology into medical and public health curricula.
- There is increasing demand for biostatistical, epidemiological, and clinical trial management training, which BMRC is beginning to address through partnerships.

International and Regional Collaboration

- BMRC maintains active collaboration with:
  - World Health Organization (WHO)
  - UNICEF
  - JICA
  - International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR, B)
- Regional cooperation on shared health issues such as dengue, malnutrition, and climate-induced health risks is gaining momentum.

Trends and Future Outlook

- **Shift from basic to applied research:** There is growing interest in health systems research, implementation science, and digital health innovations.
- **Stronger focus on equity and inclusion:** Research projects increasingly address gender, socioeconomic, and geographic disparities.
- **Integration with policy:** BMRC is facilitating mechanisms to bring researchers and policymakers together, ensuring that research directly informs national health policies.
- **Climate and health nexus:** Research on the impact of climate change on disease patterns and health outcomes is a rising priority.
- **One Health approach:** There's growing integration of human, animal, and environmental health research to combat zoonotic diseases and AMR.

Key Findings and Contributions

1. Research on NCDs informed screening protocols.
2. Nutrition studies supported national anthropometric monitoring.
3. Diagnostic imaging research improved public hospital capacity.
4. The BMRC Bulletin (h-index 22) disseminates research across multiple health domains.

Implementation Highlights

The Bangladesh Medical Research Council (BMRC) has been instrumental in advancing health research and policy implementation in Bangladesh. Here are some key highlights of BMRC's program implementations:

Research Promotion and Coordination

BMRC identifies and prioritizes health research areas to address national health challenges effectively. The council provides grants to conduct research in these identified priority areas, fostering innovation and evidence-based solutions.

Establishment of Research Cells:

BMRC established research cells in eight medical colleges to decentralize research management and build institutional capacity.

Capacity Building and Training

BMRC delivered 147 training programs covering research methodology, biostatistics, scientific writing, and IRB procedures, reaching 2,568 participants including researchers, students, and ethics committee members.

Knowledge management

BMRC maintains a comprehensive database with over 5,000 research abstracts from Bangladeshi journals and provides MEDLINE and online literature search services to support evidence synthesis.

National Health Research Strategy

BMRC has formulated a National Health Research Strategy to promote research that contributes to the improvement of human health and welfare in Bangladesh.

Recommendations

Policy Recommendations

1. Strengthen P&R-BMRC coordination mechanisms through formalized joint planning, regular coordination meetings, and integrated monitoring frameworks to maximize synergies.
2. Integrate research ethics across all DGHS facilities by expanding IRB support, standardizing ethical review processes, and building ethics capacity in district and upazila health facilities.
3. Establish joint research prioritization framework that aligns BMRC funding priorities with P&R operational needs, ensuring research addresses implementation challenges.
4. Align development projects with national research strategy by incorporating research components in project design and ensuring findings inform policy development.

Operational Improvements

Develop a unified digital platform integrating BMRC's research portal with P&R's project management systems for seamless data flow and reduced duplication.

Standardize capacity building curricula, creating joint training programs that address both research skills and operational implementation competencies.

Implement a joint monitoring and evaluation framework with shared indicators, regular reviews, and coordinated reporting to track research-to-policy outcomes.

Streamline approval processes by harmonizing ethical review timelines with project implementation schedules and reducing administrative burdens.

Resource and Capacity Needs

1. Sustainable funding for RPCC operations, DAPSU expansion, and BMRC research grants to ensure continuity of critical functions.
2. Workforce development in research management, data analytics, financial management, biostatistics, and implementation science through advanced training and fellowship programs.
3. Infrastructure investments in research facilities, laboratory equipment, digital systems, and physical spaces for research cells and coordination units.
4. International partnership development to access technical expertise, funding opportunities, and global best practices in research governance and health planning.

Technical Notes

Data Sources

P&R:

- Internal DGHS reports and project documents
- Research findings from national health facilities
- DAPSU dashboards and monitoring reports

BMRC:

- BMRC research databases and grant records
- NREC ethical review documentation
- BMRC Bulletin publications
- Training program records and participant data

References

1. Directorate General of Health Services (DGHS) reports and strategic papers
2. Bangladesh Medical Research Council. Official website and publications
3. Bangladesh Medical Research Council Bulletin (peer-reviewed journal)
4. WHO and UNICEF documentation supporting RPCC and research coordination
5. National Health Research Strategy, Government of Bangladesh
6. Institutional Review Board (IRB) guidelines, BMRC and DGHS
7. BMRC Ethical Guidelines for Biomedical Research

List of Development Projects

List of Development Projects overseen by Planning and Research, DGHS

1. Establishment of Gopalganj Dental College and Hospital, Gopalganj (2nd revision)
2. Jamalpur Medical College Hospital and Nursing College, Jamalpur (2nd revised)
3. Establishment of Patuakhali Medical College and Hospital, Patuakhali
4. Maternal and Child Health and Health System Improvement (Component 2: Modernization of Diagnostic Imaging System of Eight Divisional Medical College Hospitals) (First revision)
5. Expansion of National Institute of Neurosciences and Hospital (2nd revision)
6. Establishment of 500-bedded Medical College Hospital and ancillary buildings in Jashore, Cox's Bazar, Pabna, and Noakhali (First revision)

7. Sunamganj Medical College and Hospital, Sunamganj (First revision)
8. Establishment of complete Cancer, Heart, Kidney Treatment centres in 8 divisional medical college hospitals
9. Establishment of 50 beds in medical colleges and 10 beds in district sadar hospitals for kidney dialysis
10. COVID-19 emergency response and pandemic preparedness (2nd revision)
11. Establishment of Burn and Plastic Surgery Unit in 5 medical college hospitals (Sylhet, Barishal, Rangpur, Rajshahi, and Faridpur)
12. Hospital-based medical waste management in 15 government hospitals (First revision)
13. Inclusive Services and Opportunities for Host and FDMN Communities
14. China Aid Project of the Burn Unit of Chittagong Medical College Hospital in Bangladesh

Health Information System and eHealth

Key Highlights

In 2024, Management Information System (MIS) made major strides toward a Smart Health Management System. The Shareable Health Records (SHR) platform generated 4,783,342 unique Health IDs, while telemedicine services reached record engagement- 83,551 consultations and 1,942,486 calls handled by Shastho Batayon 16263 for 24/7 nationwide medical support. A database of 12,043 injured individuals and 834 martyred individuals during the anti-discrimination student and mass uprising has been developed.

Digital infrastructure expanded with Hospital Automation in 12 facilities, VaxEPI registering and completing HPV vaccinations for 4,245,253 girls, and the distribution of 4,635 ICT units to healthcare facilities. The eVLMIS system, integrating blockchain and AI, was launched in Dhaka South, Dhaka North, and Narayanganj City Corporation for next-generation vaccine logistics management.

Emergency preparedness improved through HEOC-led coordination of public health crises. Birth and death notification systems achieved 62.89% and 67.38% success rates respectively, though data error rates highlight the need for stronger validation processes.

Key challenges remain in system data standardization, interoperability, data quality, and cybersecurity. Future priorities include enhancing cybersecurity frameworks, improving system integration, and expanding digital health services nationwide with special focus to underserved areas.

Background and Strategic Objectives

Background

Since 2008, the Management Information System (MIS) under DGHS has led Bangladesh's shift toward a Smart Health Management System. Implemented through the Ministry of Health and Family Welfare (MOHFW), the integrated Health Information System (HIS) and eHealth programs aim to deliver accessible, patient-centric, and data-driven healthcare.

Core Infrastructure and Systems MIS operates through multiple integrated platforms including Shareable Health Records (SHR), Hospital Automation using OpenMRS+, Community Health Management through OpenSRP, Human Resource Information System (HRIS), District Health Information Software 2 (DHIS2), and comprehensive Telemedicine services. The system maintains five key national registries: Facility Registry, Provider Registry, Geo-location Registry, Patient Registry, and Terminology Registry, enabling seamless data exchange across all health platforms.

Service Delivery Platforms The digital health ecosystem encompasses citizen-centric applications such as Smart Health BD mobile application, Citizen Vaccine Portal (VaxEPI), Online Birth and Death Notification services, and eAppointment systems. Advanced systems including the Health Emergency Operations Center (HEOC), ICT Equipment Distribution & Tracking System, and eVLMIS provide operational support and emergency response capabilities.

Technological Innovation Recent innovations include blockchain-enabled vaccine logistics management, AI-powered virtual assistance, GIS-based microplanning initiatives, and IoT integration for cold chain monitoring. The system leverages big data analytics for intelligent demand forecasting and implements comprehensive cybersecurity measures for health data protection.

Strategic Objectives

Table 10.1. Strategic objectives of MIS

Advancement of Digital Health Infrastructure	Enhancement of Patient-Centric Care	Evidence-Based Health Governance
• Establish a centralized health data repository to securely archive comprehensive medical records for each citizen, utilizing a distinct health identification. • Ensure comprehensive interoperability among all health information platforms, including the SHR, DHIS2, HRIS, and specialized systems. • Strengthen cybersecurity frameworks to safeguard personal health information and uphold public confidence in digital health services.	• Enhance accessible and seamless telehealth services that are available at any time and from any location through the expansion of telemedicine networks. • Implement comprehensive hospital automation systems to enhance healthcare efficiency through digitized records and optimized patient flow. • Develop comprehensive mobile health applications that empower frontline workers in delivering exceptional maternal and child healthcare services.	• Support the formulation and implementation of national health policies through the integration of robust, data-driven decision-making frameworks. • Enhance and fortify real-time monitoring and evaluation systems across all tiers of healthcare facilities. • Promote a culture of data-driven accountability and transparency in the delivery of public health services through the implementation of comprehensive dashboard systems.

Infrastructure and Key Systems

The data show Bangladesh's increasing use of digital health. Telemedicine and SHR use indicate a shift to remote, patient-focused care. Data quality assurance and system interoperability need improvement. Citizen participation in platforms like VaxEPI shows public acceptance of digital health.

Table 10.2. Digital Health System Performance Overview

System	Purpose/Description	Key Achievements 2024
Shareable Health Records (SHR)	Centralized digital health profiles accompanied by distinctive Health IDs for comprehensive lifelong medical records.	4,783,342 Health IDs have been meticulously generated and seamlessly integrated with all prominent health platforms.
Telemedicine Services	Remote specialist consultations are facilitated through an extensive network of 234 centers nationwide.	83,551 consultations (highest); top conditions: Scabies (11,466), Tinea corporis (6,472)

Table 10.2 contd.

Table continued...		
System	**Purpose/Description**	**Key Achievements 2024**
Shastho Batayon 16263	24/7 national telehealth hotline for medical consultation and emergency assistance.	1,942,486 calls addressed; predominant conditions: Common Cold (33,304), Viral Fever (22,298).
Hospital Automation	Electronic Medical Record management, scheduling of appointments, and billing processes utilizing OpenMRS+.	Executed across 12 facilities, with an additional 18 facilities currently in the developmental phase.
VaxEPI Platform	An online system for the registration, tracking, and management of vaccinations.	The HPV vaccination initiative for 4,245,253 girls has been successfully completed.
DHIS2	National health data collection, analysis, and reporting platform.	The Dengue Tracker and Dashboard have been unveiled.
HRIS	Human resource management within healthcare facilities and among providers.	Automatic generation of gradation list for promotion; 193,544 active participants.
Smart Health BD	Household data collection; Digital records for domiciliary health services through OpenSRP.	Expanded immunization service mapping to 39 districts and 11 city corporations using digital tools for zero-dose child identification and equitable vaccine delivery planning.

System Integration and Data Quality Trends

Interoperability Progress Digital health platforms demonstrate growing integration with SHR serving as the central hub connecting Hospital Automation, Smart Health BD, VaxEPI, and specialized systems. However, full interoperability remains incomplete, with ongoing challenges in seamless data exchange across all platforms.

Data Quality Performance Birth and death notification systems show moderate success rates (62.89% birth, 67.38% death notifications) with significant error categories indicating data validation challenges. Error 1 represents the largest failure mode (30.38% birth, 21.58% death), highlighting needs for improved data quality assurance processes.

Service Utilization Growth Telemedicine consultations increased by 95.3% from 2023 to 2024, demonstrating accelerating adoption of remote healthcare services. Citizen engagement with digital platforms shows strong growth, particularly in vaccination services and emergency health consultations.

Emerging Technology Integration and Innovation

Advanced Technology Deployment The eVLMIS system introduced blockchain technology, AI-powered analytics, and IoT integration for vaccine supply chain management in major urban areas. GIS-based microplanning expanded to 39 districts and 11 city corporations, enhancing immunization service mapping and zero-dose child identification.

Emergency Response Capabilities Health Emergency Operations Center (HEOC) demonstrated robust coordination during public health emergencies, while the National Registry for Anti-Discrimination Mass Uprising, a digital platform developed to collect, verify, and publish a comprehensive list of injured and martyred during the anti-discrimination student and mass uprising. Medical cases were included here from different government and private health facilities.

Each medical case was verified by the respective District Committee through this platform after physical verification. Following verification through the platform, a total of 12,043 injured individuals and 834 martyred individuals were officially recorded for use by the Ministry of Liberation War in the publication of the official gazette.Finally, system generated heath ID card were issued to the gazetted individuals by the Health Services Division.

Key Indicators (Highlights)

Table 10.3. Number of ICT equipment distributed by MIS in 2024

ICT Equipment	Stock	Distributed
Desktop	3,000	1,826
Laptop	2,000	35
Printer	2,110	1379
UPS	2,500	1209
Scanner	205	135
Multimedia	60	51

Table 10.4. Key indicators of MIS services and HIS & eHealth programs

Indicator	Unit of measurement	Achievement in 2024
Health ID Generated	No	4783342
Citizens Registered on VaxEPI	No	1367547
Telemedicine Consultations	No	83551 (highest till date)
Hospital Automation Implementation	No	12
Successful Birth Notification Sent	%	62.89
Successful Death Notification Sent	%	67.38

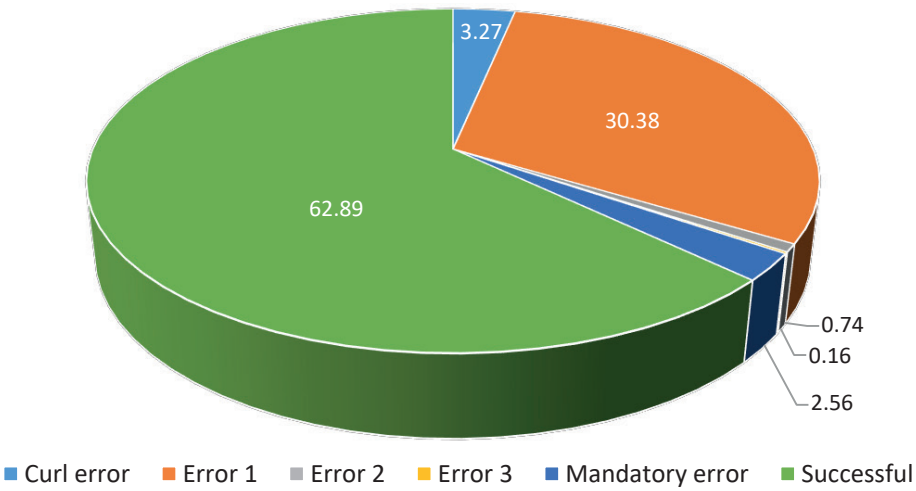

Figure 10.1. Dispense rate of successful and failed birth notifications, 2024

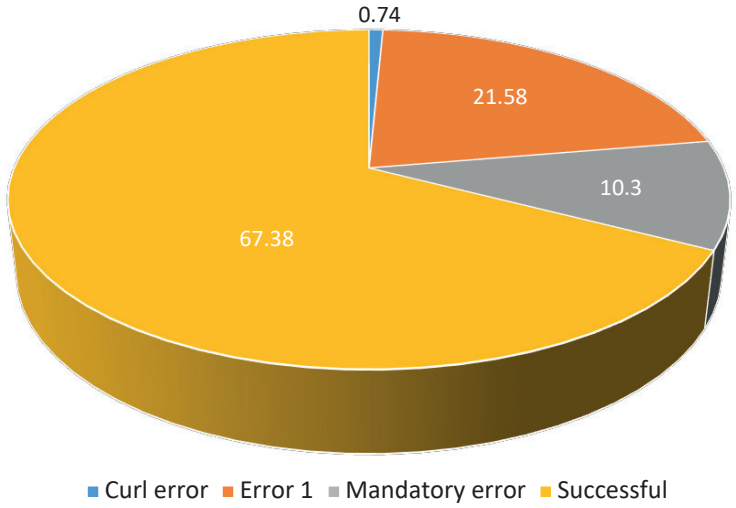

Figure 10.2. Dispense rate of successful and failed death notifications, 2024

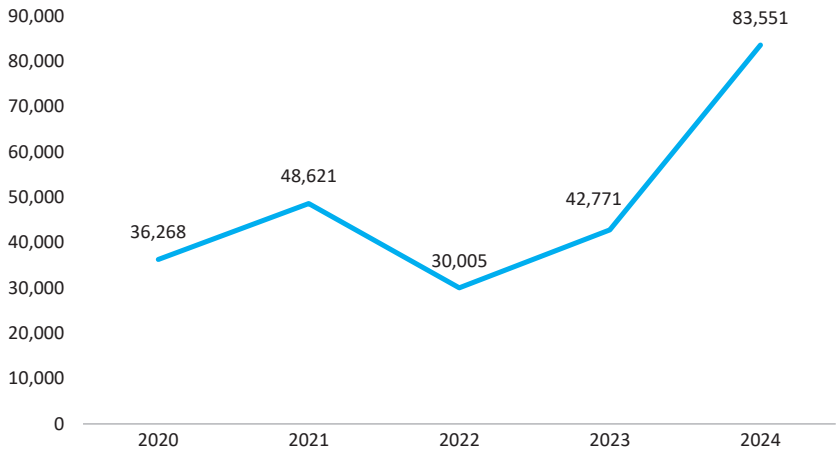

Figure 10.3. Year-wise number of patient consultations through Telemedicine service from 2020 to 2024 (Source: DHIS2)

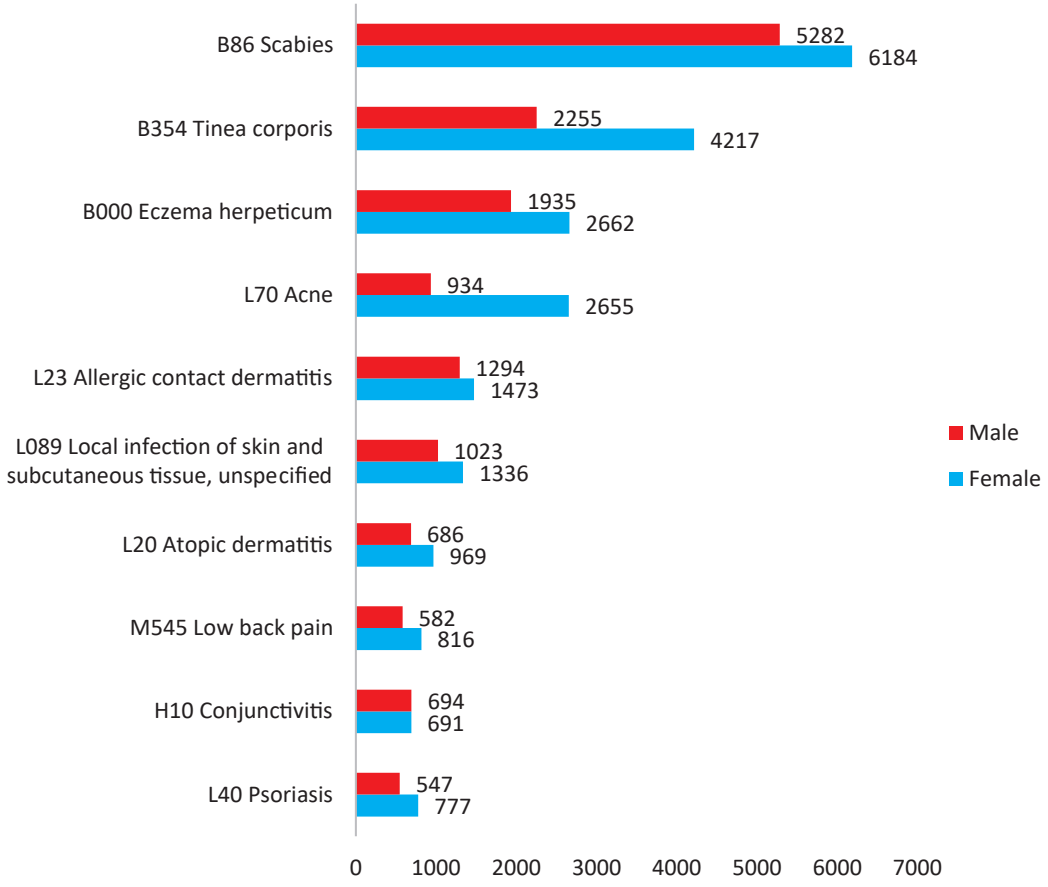

Figure 10.4. Top 10 Disease profile obtained from Telemedicine service in 2024 (Source: DHIS2)

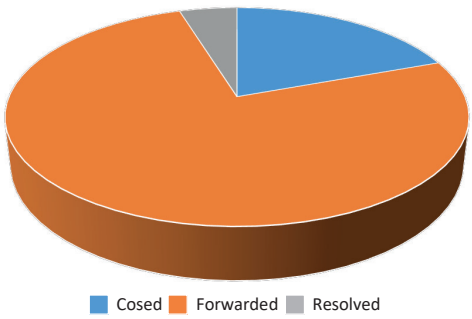

Figure 10.5. Complaint and Suggestion Status in 2024

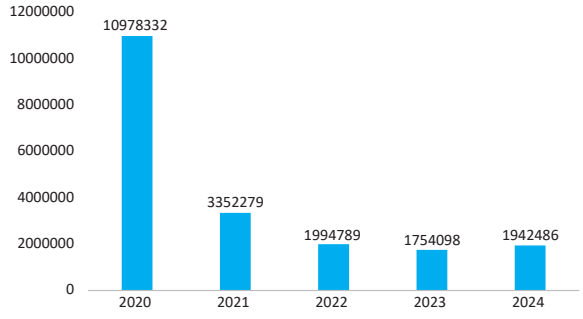

Fig 10.6. The total call volume received through Shastho Batayon 16263 (Source: Shastho Batayon 16263 Dashboard)

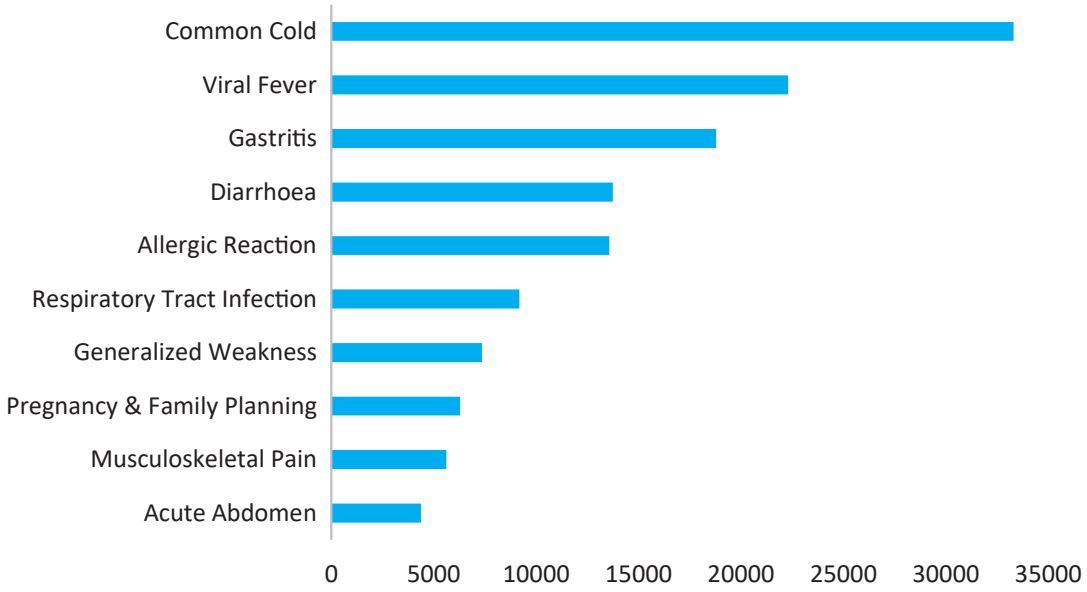

Fig 10.7. Top 10 Diseases in 2024 through *Shastho Batayon 16263*

Implementation Highlights

Digital Infrastructure Development and Scaling

ICT Equipment Distribution Network: Established centralized tracking system processing 4,635 equipment demands with strategic deployment of 1,826 desktop computers, 1,379 printers, and 1,209 UPS units across healthcare facilities nationwide

eVLMIS Blockchain Implementation: Launched next-generation vaccine logistics management system in Dhaka South, Dhaka North, Narayanganj City Corporations with real-time inventory tracking and intelligent demand forecasting capabilities

GIS-Based Digital Microplanning: Expanded immunization service mapping to 39 districts and 11 city corporations using digital tools for zero-dose child identification and equitable vaccine delivery planning

Cybersecurity Framework Development: Implemented comprehensive data encryption, access controls, and vulnerability assessment protocols to safeguard health information systems and maintain data integrity

Service Delivery Innovation and Expansion

Community-Based Mobile Health: Deployed Smart Health BD application with OpenSRP dashboard for frontline workers enabling real-time monitoring and data-driven decision-making in maternal and child healthcare programs

Private Healthcare Facility Integration: Processed registrations for 2,844 private hospitals/clinics and 5,391 diagnostic centers through digital approval systems ensuring quality healthcare service standards nationwide

Citizens' Digital Engagement: Operated SMS-based grievance system processing 15,823 complaints with 75.5% forwarded to facilities and comprehensive citizen feedback integration into service improvement processes

Emergency Registry Development: Created National Registry for Anti-Discrimination Mass Uprising with district-level verification processes, demonstrating rapid deployment capabilities during national emergencies

Capacity Building and Quality Assurance

Comprehensive Digital Health Training: Conducted systematic training programs for medical officers, statisticians, and nurses in HRIS, DHIS2, MCCoD, SHR, and digital health technologies across all administrative levels

Quality Monitoring and Evaluation: Established MIS monitoring teams with standardized supervision protocols, data quality checks, and performance feedback mechanisms ensuring continuous system improvement

Technical Support Infrastructure: Deployed dedicated teams for system maintenance, troubleshooting, and user support with 24/7 operational capacity across all digital health platforms

Evidence-Based Decision Making: Enhanced data interpretation and dashboard analysis capabilities supporting health managers and policymakers in strategic planning and resource allocation

Recommendations

Policy Recommendations

1. Comprehensive Health Data Protection Framework: Immediately complete the National Digital Health Architecture Blueprint and introduce robust Health Data Protection Policies ensuring secure collection, storage, and use of personal health data with clear guidelines for patient consent, data sharing protocols, and privacy protection measures aligned with international standards

2. National Data Exchange Standards: Develop and enforce comprehensive national data exchange and interoperability standards among all health information systems, including public and private platforms, to ensure seamless integration and eliminate data silos

3. Cybersecurity Governance Framework: Establish mandatory cybersecurity frameworks for all health information systems with regular security audits, vulnerability assessments, and incident response protocols to protect against data breaches and cyber threats

4. Digital Health Service Integration: Institutionalize SHR, Telemedicine, and eHealth services within national health strategies and universal health coverage frameworks to ensure sustainable financing and service continuity

Operational Improvements

a. System Integration and Interoperability:

1. Achieve full interoperability among SHR, DHIS2, HRIS, OpenSRP, VaxEPI, and specialized platforms through standardized APIs and data exchange protocols to eliminate duplicate data entry and improve system efficiency

2. Strengthen birth and death notification systems to achieve above 90% success rates through improved data validation processes, error handling mechanisms, and real-time troubleshooting capabilities

3. Expand Hospital Automation systems beyond the current number of facilities to all district and upazila hospitals with standardized implementation protocols and comprehensive staff training programs

4. Enhance telemedicine service quality through improved diagnostic equipment, high-speed internet connectivity, and specialist availability scheduling to meet growing demand effectively

b. Data Quality and Monitoring Enhancement:

1. Implement real-time data quality monitoring systems with automated validation checks, error detection algorithms, and feedback mechanisms to healthcare facilities for immediate correction

2. Establish comprehensive data review meetings and evidence-based decision-making protocols at all administrative levels to maximize utilization of generated health information

3. Develop advanced analytics capabilities, including predictive modelling, trend analysis, and early warning systems for disease outbreaks and health system performance monitoring

c. Service Delivery Optimization:

1. Scale Community-Based Surveillance and Smart Health BD applications to all districts with enhanced mobile connectivity and community health worker training programs
2. Implement AI-powered virtual assistants and chatbots for common health queries to reduce burden on human resources while providing 24/7 basic health guidance
3. Establish mobile health units equipped with digital health technologies to serve remote and underserved populations with integrated service delivery

Resource and Capacity Requirements Needs

a. Human Resource Development:

1. Establish specialized technical teams for system administration, cybersecurity management, data analytics, and user support at national, divisional, and district levels
2. Implement succession planning for critical technical positions and create career development pathways for health informatics professionals to ensure sustainable capacity
3. Expand digital literacy programs for healthcare workers and communities to maximize utilization of digital health services and improve health outcomes

b. Infrastructure and Technology Investment:

1. Invest in establishment of Network Operation Center (NOC) and Security Operation Center (SOC) for ensuring advanced cybersecurity infrastructure.
2. Deploy modern diagnostic equipment integrated with telemedicine platforms to enhance remote consultation quality and expand specialist service accessibility.

c. Financial Sustainability and Innovation:

1. Develop sustainable financing models for software maintenance, licenses, system upgrades, and infrastructure development through diversified funding sources including government budget, development partner support, and innovative financing mechanisms
2. Create innovation funds supporting pilot projects in AI, big data analytics, blockchain technology, and mobile health integration to continuously modernize health operations

Research and Development Support:

1. Establish health informatics research centers focused on operational research, technology evaluation, and innovation development to support continuous system improvement
2. Establish an Interoperability and AI lab focused on innovation in utilizing edge technologies in healthcare services.
3. Develop partnerships with academic institutions and research organizations for collaborative research in digital health, health informatics, and health technology assessment
4. Create knowledge management systems for systematic documentation of experiences, lessons learned, and best practices in digital health implementation
5. Support international collaboration and knowledge exchange through participation in global health informatics networks and research partnerships

Technical Notes

Data Sources

- Health Dashboard Platform
- Human Resource Information System (HRIS)
- District Health Information Software 2 (DHIS2)
- OpenSRP Field Data
- Shared Health Records (SHR) System
- VaxEPI Vaccination Platform

- Telemedicine Service Database
- Shastho Batayon 16263 Call Center

Collection Methodologies

- Real-time Electronic Data Capture
- Routine Institutional Reporting
- Mobile Application Data Acquisition
- Call Center and Telemedicine Documentation
- Automated System Surveillance

Frequency of Updates

- Real-time Systems
- Daily Updates
- Weekly Reporting
- Monthly Evaluations
- Annual Assessments

Quality Assurance

- Automated Data Validation
- Oversight and Monitoring
- Dashboard-based Quality Control
- User Feedback Mechanisms
- Regular System Audits

Limitations and Methodological Considerations

- Infrastructure for Connectivity specially in hard-to-reach areas
- Variability in Data Quality
- Completeness of System Integration

References

- Bangladesh Digital Health Strategy 2023-2027
- Technical Documentation and Guidelines
- Annual Reports and Performance Documents
- Routine Health Information System
- National Health Dashboard

Financing Healthcare

Executive Summary

Bangladesh's health financing landscape is characterized by a mixed health system with a pluralistic financing structure. Health expenditure is predominantly driven by out-of-pocket (OOP) payments, which account for approximately 69% of current health expenditure (as per National Health Accounts 1997–2020), placing significant financial pressure on households. The government contributes around 23% of total health expenditure, primarily through the Ministry of Health and Family Welfare (MOHFW), while the remainder is covered by development partners, NGOs, and other private sources. Although the nominal allocation to health in the national budget has increased over time, in real terms it has remained largely stagnant over the past decade. Moving forward, enhancing domestic resource mobilization, reforming public financial management, and improving efficiency in purchasing mechanisms are essential to achieving Universal Health Coverage (UHC).

The Health Economics Unit (HEU), under the MOHFW, plays a pivotal role in advancing the country's health financing agenda and serves as the national focal point for UHC financing. HEU leads the development and monitoring of the Health Care Financing Strategy (2012–2032) and conducts key exercises such as the National Health Accounts (NHA) and Public Expenditure Review (PER). These evidence-generating activities support policymakers in understanding financing trends and shaping resource allocation. In addition to analytical work, HEU actively engages in policy dialogue, pilots strategic purchasing models, and explores innovative financing mechanisms to reduce OOP burden and improve equity and efficiency in health spending.

Background and Strategic Objectives

Background

Since independence in 1971, Bangladesh has made substantial progress in improving population health outcomes despite limited financial and human resources. The health financing landscape, however, has long been dominated by low public investment and a heavy dependence on out-of-pocket (OOP) payments, often pushing vulnerable households into financial hardship. To address this, the government formulated the Health Care Financing Strategy (HCFS) 2012–2032, setting a roadmap toward Universal Health Coverage (UHC) by 2032. The strategy emphasizes reducing OOP expenditure, ensuring financial protection, and improving access to quality healthcare. In line with this vision, the Shasthyo Surokhsha Karmasuchi (SSK)—a flagship social health protection scheme under the Health Economics Unit (HEU) of MoHFW—was launched in 2016 to provide free healthcare services to households below the poverty line. Initially piloted in Kalihati Upazila, Tangail, the program has since expanded to multiple districts and major public hospitals, marking a significant step toward equitable health financing and social protection in Bangladesh.

Strategic Objectives

The overarching strategic objectives of Bangladesh's health financing reform and the Shasthyo Surokhsha Karmasuchi (SSK) initiative are to create a more equitable, efficient, and sustainable health system that ensures financial protection and universal access to essential healthcare services. The key goals are:

1. Generate More Resources for Health — Mobilize additional domestic resources through innovative financing mechanisms such as social health protection schemes and community-based health insurance, thereby reducing overreliance on out-of-pocket (OOP) payments.

2. Improve Equity and Access to Health Care — Ensure that all citizens, particularly the poor

and vulnerable, can access quality healthcare without financial hardship by strengthening risk pooling and equitable distribution of resources.

3. Enhance Efficiency in Resource Allocation and Utilization — Optimize existing resources through performance-based budgeting, evidence-based planning, and strengthened financial management across all levels of the health system.

4. Reduce OOP Expenditure and Catastrophic Spending — Directly alleviate the financial burden of healthcare for low-income families through tax-funded social protection and defined benefit packages.

5. Strengthen Institutional and Governance Capacity — Pilot and expand a third-party payer model under the SSK to build experience toward establishing the National Health Security Office (NHSO) with clear purchaser–provider separation, accountability, and transparency.

6. Promote Quality and Efficiency in Service Delivery — Define and enforce clinical quality standards, leverage digital health innovations such as EHR and cashless claims management, and enhance hospital autonomy for improved efficiency and patient outcomes.

Together, these objectives aim to drive Bangladesh toward Universal Health Coverage (UHC) and poverty reduction through inclusive, sustainable, and well-governed health financing reform.

Current Status and Trends

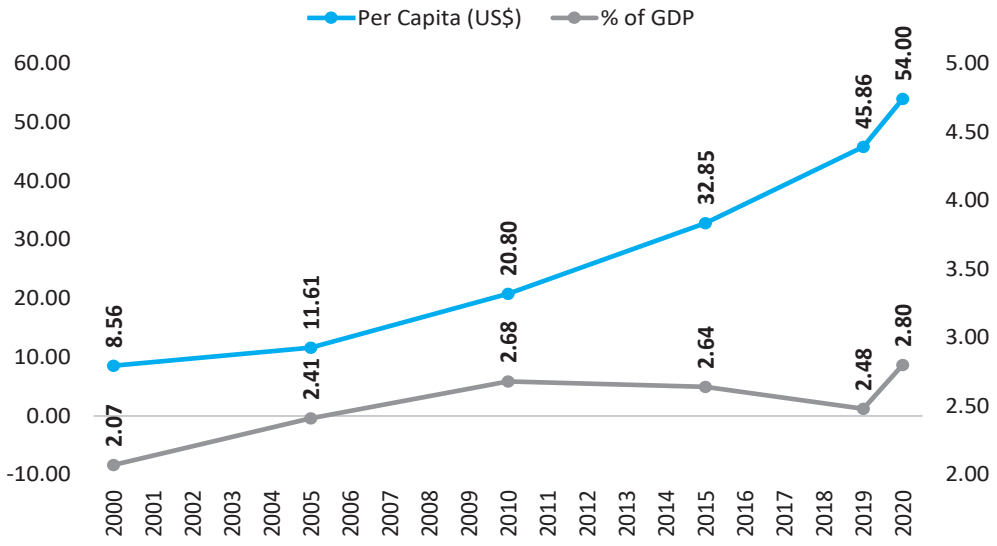

Figure 11.1. Trends of expenditure of health in USD and percentage of GDP (Source: WB, BNHA)

The graph shows a steady upward trend in Bangladesh's per capita health expenditure, rising from US $8.56 in 2000 to US $54.00 in 2020, indicating a more than sixfold increase over two decades. This reflects growing investment in health and higher service utilization as income and population expanded. However, when measured as a share of GDP, health spending shows only modest growth—from 2.07% in 2000 to 2.80% in 2020—with fluctuations throughout the period. This suggests that while absolute spending has risen, health expenditure has not kept pace with overall economic growth, implying that the sector still receives a relatively small portion of national resources. In short, Bangladesh is spending more per person on health, but health's share of the economy remains stagnant, underscoring the need for stronger financial prioritization to achieve Universal Health Coverage (UHC).

Table 11.1. Budget from 2011-2012 fiscal year to 2024-2025 fiscal year

Fiscal year	National budget (in crore)	MOHFW budget (in crore)	MOHFW budget as % of national budget	% Increase of MOHFW budget compared to previous FY	% Increase of total govt. budget compared to previous FY
2011-12	161,213	8,150	5.06	7.00	24.00
2012-13	189,326	9,130	4.82	12.02	17.44
2013-14	222,491	9,495	4.27	4.00	17.52
2014-15	239,668	11,537	4.81	21.51	7.72
2015-16	295,100	12,695	4.30	10.04	23.13
2016-17	340,605	17,486	5.13	37.74	15.42
2017-18	400,266	20,679	5.17	18.26	17.52
2018-19	464,573	23,394	5.04	13.13	16.07
2019-20	523,190	25,733	4.92	10.00	12.62
2020-21	568,000	29,247	5.15	13.66	8.56
2021-22	603,681	32,730	5.42	11.91	6.28
2022-23	678,064	36,863	5.44	13.63	12.32
2023-24	761,785	38,052	5.00	3.23	12.35
2024-25	797,000	41,407	5.20	8.82	4.63

Over the past fourteen years, Bangladesh's national budget has expanded nearly fivefold—from ৳1.61 trillion in FY2011–12 to ৳7.97 trillion in FY2024–25—reflecting strong fiscal growth. The Ministry of Health and Family Welfare (MOHFW) budget has increased proportionally from ৳8,150 crore to ৳41,407 crore, marking an average annual growth of about 12%. Despite this substantial rise in absolute terms, the health sector's share of the total national budget has remained relatively static, fluctuating between 4.3% and 5.5%, with 5.2% in FY2024–25—a marginal improvement from the previous year. This trend indicates that while the government has consistently increased health allocations, the sector's relative priority within the overall budget has not significantly changed. The recent 8.8% year-on-year rise in FY2024–25 shows renewed commitment after a slowdown in FY2023–24, yet achieving Universal Health Coverage (UHC) will require further increases in both budget share and spending efficiency.

Table 11.2. SSK Service delivery status

Indicator	Target achieved in 4th HPNSP (by 30 June, 2024)
Number of districts	7
Number of upazilas	24
Number of households registered	517485 (in 7 districts and 2 CC)
BPL Family Registered (Only in Tangail district)	200225
Total Card Distributed	155413
Number of patients visiting SSK booth for OPD services	196922 (2017-2024)
Number of IPD patients admitted and released	55744

The Shasthyo Surokhsha Karmasuchi (SSK) has expanded its coverage significantly under the 4th HPNSP, reaching 7 districts and 24 upazilas by June 2024. A total of 517,485 households have been registered across these areas, including 200,225 below-poverty-line (BPL) families in Tangail District, which remains the flagship implementation site. Out of these, 155,413 SSK cards have been distributed, enabling poor households to access free inpatient and outpatient services at designated public hospitals. Between 2017 and 2024, 196,922 patients received outpatient (OPD) care through SSK booths, while 55,744 patients were treated under the inpatient (IPD) component. These figures reflect a steady expansion of the scheme's operational footprint and growing utilization of SSK-supported health services, demonstrating tangible progress toward social health protection for vulnerable populations in Bangladesh.

Key Indicators

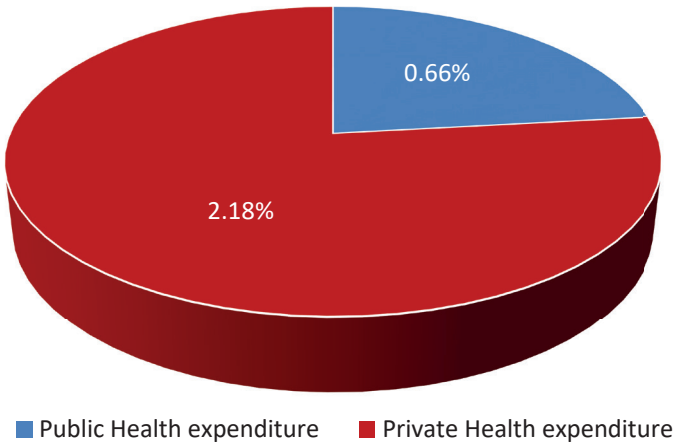

Figure 11.2. Public and private THE and their shares in GDP (Source: BNHA)

The chart shows that private health expenditure (2.18% of GDP) overwhelmingly dominates Bangladesh's total health spending, while public expenditure accounts for only 0.66%, indicating a strong reliance on household out-of-pocket payments and limited government investment in healthcare.

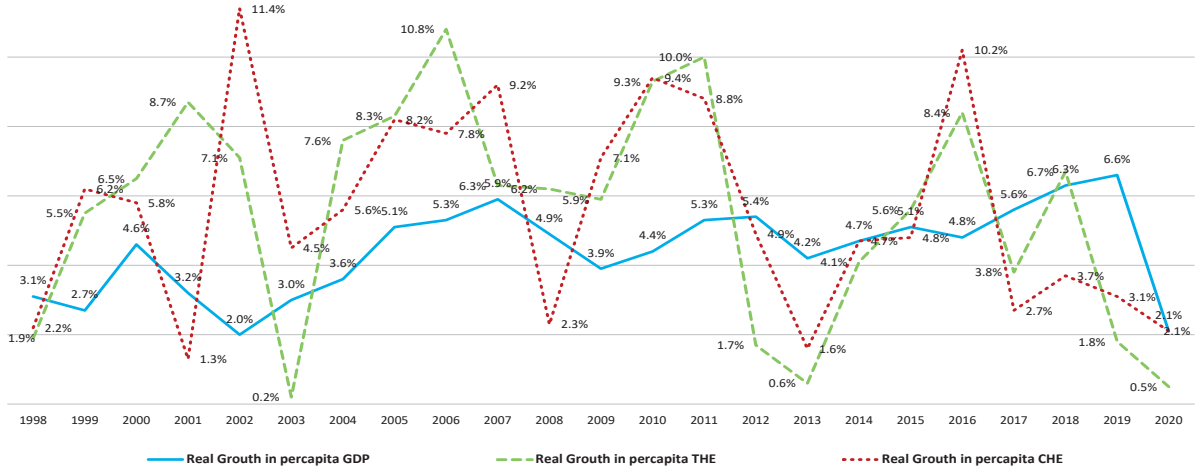

Figure 11.3. Real growth of per-capita GDP, THE and CHE, 2020 (Source: BNHA)

GDP growth has remained relatively stable, averaging around 5–6% annually, showing steady economic progress. In contrast, both THE and CHE demonstrate sharp fluctuations, with multiple spikes and dips over the years, indicating irregular investment and spending patterns in the health sector. Notably, years like 2001, 2007, 2011, and 2016 show significant surges in health expenditure growth—often outpacing GDP growth—followed by steep declines, suggesting inconsistent prioritization or episodic funding increases (e.g., donor inflows or new program launches). By 2020, health expenditure growth slowed considerably, while GDP growth remained positive, reflecting a slowdown in real health spending momentum despite sustained economic performance. This trend highlights a persistent gap between economic growth and consistent health investment, emphasizing the need for more predictable and sustained financing to strengthen Bangladesh's health system.

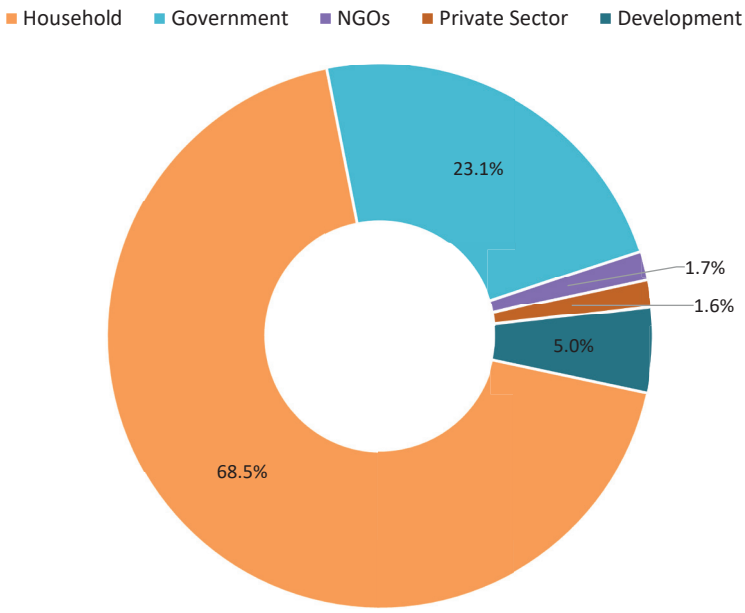

Figure 11.4. Health sector financing (THE) by key stakeholders

Households dominate health spending, contributing nearly 70% of total expenditure—mainly through out-of-pocket payments. The government accounts for around 23%, while external (donor) funding, employers, and NGOs together make up the remaining 7%. This pattern indicates a high dependency on private household spending, limited public financing, and modest donor and institutional contributions—highlighting the need to strengthen public and pooled funding mechanisms to ensure financial protection and progress toward Universal Health Coverage (UHC).

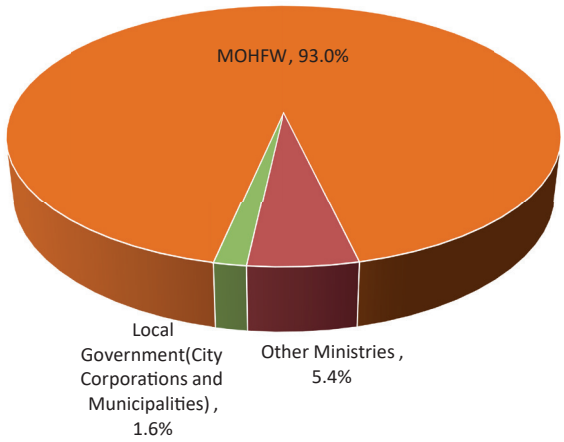

Figure 11.5. Share of different financing schemes under public spending, 2020

government-financed schemes dominate, accounting for 93.0% of total public health expenditure. In contrast, social health insurance represents 5.4%, while enterprise financing schemes contribute only 1.6%. This distribution highlights that Bangladesh's public health system remains overwhelmingly tax-funded, with very limited coverage through contributory or insurance-based mechanisms — reflecting the early stage of social health protection development in the country.

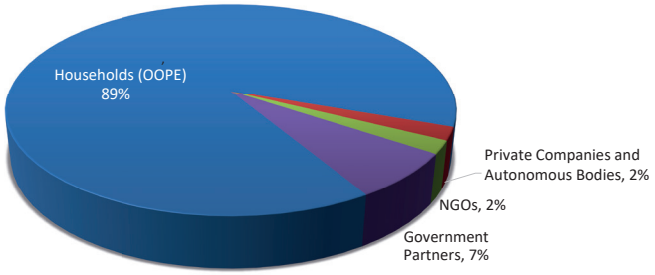

Figure 11.6. Share of different financing schemes under private spending, 2020

Households (out-of-pocket expenditure, OOPE) overwhelmingly dominate private health financing, accounting for 89% of total private spending. The remaining share is distributed among government partners (7%), private companies and autonomous bodies (2%), and NGOs (2%). This heavy reliance on household spending underscores the limited role of institutional and pre-paid mechanisms in Bangladesh's private health sector, highlighting the need for stronger financial protection systems and expansion of pooled or insurance-based funding models.

(Private sector refers to autonomous bodies, private corporations and voluntary health insurance)

Table 11.3. Total health expenditure (THE) by major financing schemes 1997-2020

Year	Government schemes (Million Taka)	Row %	Voluntary health care payment schemes (Million Taka)	Row %	Household out-of-pocket payment (Million Taka)	Row %	Rest of the world health financing schemes (Million Taka)	Row %
1997	16887	36%	1069	2%	26118	56%	2690	6%
1998	17856	35%	1249	2%	29089	57%	2715	5%
1999	18807	33%	1439	3%	32548	57%	4034	7%
2000	20626	33%	1956	3%	35893	57%	4534	7%
2001	23485	33%	1757	2%	40696	57%	6079	8%
2002	25926	32%	2529	3%	45828	56%	7276	9%
2003	25672	29%	2731	3%	51572	59%	7907	9%
2004	30310	30%	3055	3%	57899	58%	9192	9%
2005	30779	27%	5798	5%	68865	60%	9957	9%
2006	39572	29%	7746	6%	79889	58%	9908	7%
2007	42227	27%	8192	5%	95035	61%	11525	7%

Table 11.3. contd.

Table continued...

Year	Government schemes (Million Taka)	Row %	Voluntary health care payment schemes (Million Taka)	Row %	Household out-of-pocket payment (Million Taka)	Row %	Rest of the world health financing schemes (Million Taka)	Row %
2008	45887	25%	14335	8%	108236	60%	13317	7%
2009	51655	25%	13413	6%	125286	60%	17317	8%
2010	62974	26%	14876	6%	148549	60%	19641	8%
2011	71782	24%	24104	8%	176829	60%	22314	8%
2012	75386	23%	22363	7%	203151	62%	27144	8%
2013	84124	24%	12143	3%	229555	65%	29701	8%
2014	93453	24%	12490	3%	259580	66%	30614	8%
2015	102420	23%	14351	3%	299857	67%	32113	7%
2016	126638	24%	18839	4%	354610	67%	30567	6%
2017	153697	26%	21975	4%	385640	65%	33289	6%
2018	188632	28%	23312	4%	432067	64%	35646	5%
2019	189614	26%	24700	3%	480086	66%	37857	5%
2020	179742	23%	25943	3%	532740	69%	38922	5%

The data shows that Bangladesh's health financing structure remains heavily dominated by household out-of-pocket payments (OOP), which consistently account for 55–69% of total health spending throughout the period. Government health financing schemes contribute between 23–36%, showing a gradual decline in relative share over time despite increasing in absolute value—from ৳16,887 million in 1997 to ৳179,742 million in 2020. Meanwhile, voluntary health payment schemes (e.g., private insurance) remain negligible—around 2–6%, and rest of the world contributions (mainly donor funding) steadily decreased from 9% in the late 1990s to about 5% in 2020.

Overall, the trend highlights persistent underfunding of public and pooled schemes and a continued overreliance on households as the primary source of health financing. This structure underscores the need for stronger public investment, expansion of social health protection mechanisms, and sustainable domestic resource mobilization to reduce financial hardship and move toward Universal Health Coverage (UHC).

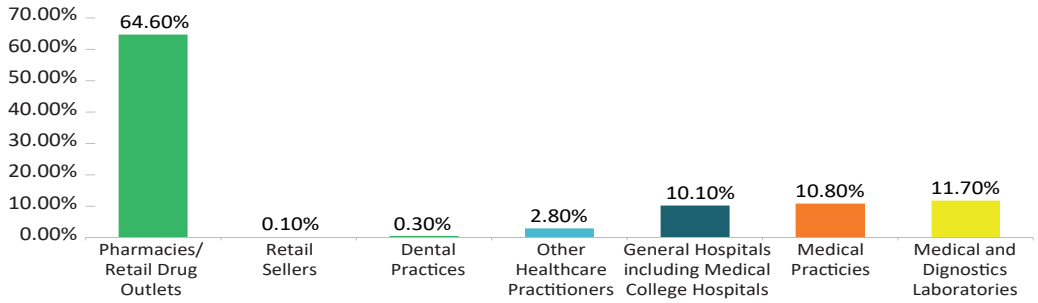

Figure 11.7. Out-of-pocket expenditure (OOPE)

Medicine purchases dominate household health spending, followed by smaller shares for hospital services, medical goods, diagnostics, and other outpatient services. This indicates that most household health costs are driven by drug and pharmacy expenses, highlighting the high burden of direct payments for medicines and the limited role of risk-pooling or prepayment mechanisms in covering essential healthcare costs.

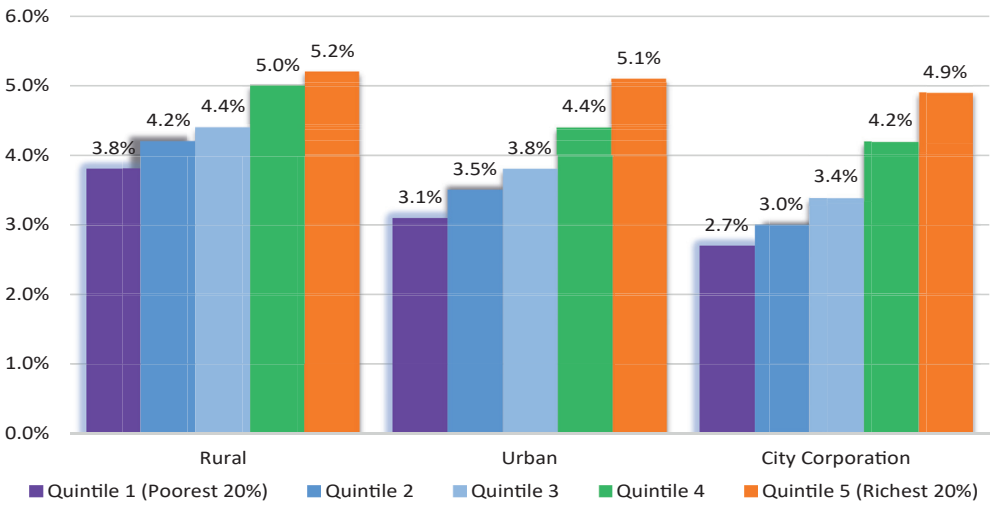

Figure 11.8. Comparison of OOPE share as % of consumption by quintiles and location

The chart compares the share of out-of-pocket expenditure (OOPE) as a percentage of total household consumption across income quintiles and residence types. It shows a clear income gradient, with OOPE increasing from the poorest to the richest quintile in all areas. In rural areas, the poorest households spend about 3.8% of their consumption on health compared to 6.2% among the richest. In urban areas, the range is 3.1% to 5.1%, while in city corporations, it is 2.7% to 4.9%. Overall, the data suggest that although the rich spend a higher proportion of their income on health, the financial burden is heavier on the poor, as health expenses consume a larger share of their limited resources, especially in rural settings.

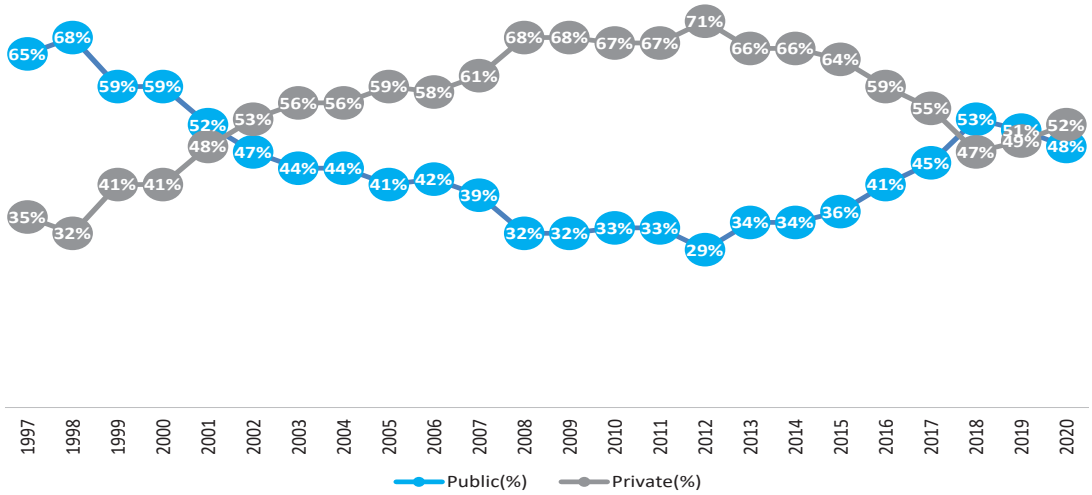

Figure 11.9. Expenditure at hospitals by public and private sectors, 1997-2020

In 1997, public hospitals accounted for 65% of total hospital spending, while private hospitals contributed only 35%. Over time, this trend reversed — private sector spending grew steadily, peaking at 71% in 2012, while public expenditure fell to its lowest point at 29%. However, since 2016, the gap has started to narrow, with private expenditure declining to 52% and public expenditure rising to 48% by 2020. This shift suggests renewed public sector investment in hospital services in recent years, although the private sector remains the dominant provider of hospital-based care in Bangladesh.

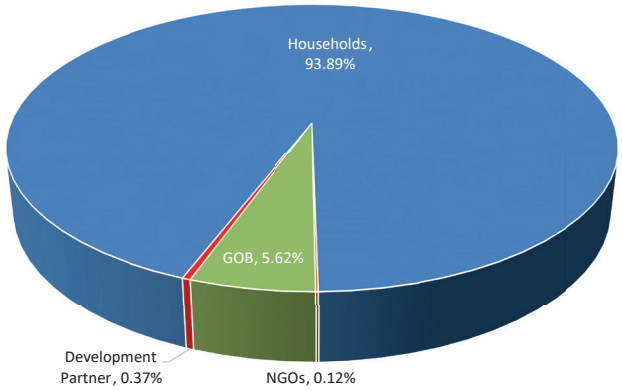

Figure 11.10. Percentage of Total Pharmaceutical Expenditure (TPE) by financing source

Households are overwhelmingly the primary payers, contributing 93.89% of total spending on medicines—reflecting the dominance of out-of-pocket payments. The Government of Bangladesh (GOB) accounts for only 5.62%, while development partners and NGOs contribute a negligible 0.37% and 0.12%, respectively. This highlights the extreme household burden in financing medicines and the limited role of public or donor funding in ensuring access to affordable pharmaceuticals.

Table 11.4. Pharmaceutical Expenditure by Providers, 2020

Provider Code	Providers	Total (crore tk)	Row%
HP.1.1	General hospitals	1,518	3.9%
HP.1.3	Specialized hospitals (other than mental health hospitals)	1,103	2.8%
HP.3.4	Ambulatory health care centers	774	2.0%
HP.4	Providers of ancillary services	1,025	2.6%
HP.5.1	Pharmacy	34,437	88.5%
HP.6	Providers of preventive care	40	0.1%
Total		38,897	

Pharmacies (HP.5.1) overwhelmingly dominate the sector, accounting for 88.5% of total pharmaceutical spending (৳34,437 crore out of ৳38,897 crore). The remaining expenditure is spread thinly across general hospitals (3.9%), specialized hospitals (2.8%), ancillary service providers (2.6%), and ambulatory health care centres (2.0%), while providers of preventive care contribute only 0.1%. This distribution underscores the medicine-centric nature of Bangladesh's health spending, with the vast majority of funds spent directly at pharmacies rather than on institutional or preventive care—reflecting both the limited financial protection mechanisms and the high dependence on out-of-pocket drug purchases by households.

Table 11.5. Core ESP expenditure and Per-Capita spending by public and private, 2020

Core ESP Classification	Public		Private		Total	
	Million Taka	Per-Capita	Million Taka	Per-Capita	Million Taka	Per-Capita
Maternal, Neonatal, Child and Adolescent	49,905	294	110,274	649	160,179	943
Family Planning (FP)	12,347	73	1,508	9	13,855	82
Nutrition	1,525	9	9,721	57	11,247	66
Communicable Diseases	9,786	58	12,974	76	22,761	134
Non-Communicable Diseases	4,438	26	90,368	532	94,806	558
Management of other common conditions	22,756	134	53,934	318	76,691	452
			-		-	
Total ESP	100,757	593	278,780	1,642	379,537	2,235
Total THE	179,742	1,058	597,605	3,519	777,347	4,578
ESP as % of THE	56.1%		46.6%		48.8%	

Bangladesh is firmly committed to achieving Universal Health Coverage (UHC) by 2030, in line with the United Nations Sustainable Development Goals (SDGs). UHC encompasses the full range of essential, quality health services—from health promotion and prevention to treatment, rehabilitation, and palliative care—ensuring access for all without financial hardship. The Essential Service Package (ESP) developed by the Ministry of Health and Family Welfare (MOHFW) serves as the operational framework for realizing UHC in the country.

Since 1998, the MOHFW has maintained and periodically updated the ESP list to reflect changing disease patterns and population health needs. The latest update was made in 2016 under the Health, Nutrition, and Population Sector Program (HNPSP) 2017–2022. The ESP includes five core service areas:

1. Maternal, Neonatal, Child, and Adolescent Health (MNCAH)
2. Family Planning (FP)
3. Nutrition
4. Communicable Diseases
5. Non-Communicable Diseases (NCDs)

These are complemented by services addressing other common medical conditions. ESP services are delivered nationwide—from Community Clinics to Medical College and Super-Specialty Hospitals—ensuring coverage across all levels of the health system.

In the absence of a standardized primary healthcare expenditure framework, the Health Economics Unit (HEU) considered spending on ESP services as a proxy for Primary Health Care (PHC) investment. In 2020, Bangladesh spent approximately ৳380 billion on ESP-related services, representing 48.8% of the Total Health Expenditure (THE). Of this, 27% was financed by the government, while the remaining 73% came from the private sector, including NGOs.

A detailed breakdown shows that the public sector spent ৳100,757 million (56.1% of its total health budget) on ESP services, compared to ৳278,780 million (46.6%) by the private sector. The largest share of expenditure was on MNCAH services (৳160,179 million), followed by NCDs (৳94,806 million) and management of other common conditions (৳76,691 million). Spending on Family Planning (৳13,855 million), Communicable Diseases (৳22,761 million), and Nutrition (৳11,247 million) were comparatively lower.

Per-capita spending reached ৳2,235, with public expenditure at ৳593 and private expenditure at ৳1,642, reflecting a strong dominance of private spending in healthcare financing. While ESP accounts for nearly half of total health expenditure—indicating its central role in the health system—private sector financing still outweighs public investment, particularly in NCDs and curative care. Strengthening public sector funding and risk-pooling mechanisms remains critical for ensuring equitable access and achieving UHC in Bangladesh.

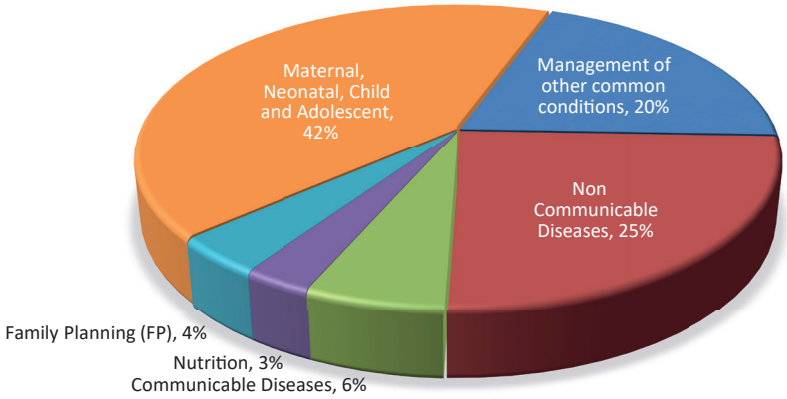

Figure 11.11: Percentage share of core ESP services, 2020

The largest portion of spending is devoted to Maternal, Neonatal, Child, and Adolescent Health (42%), underscoring the country's strong focus on reproductive and child health. Non-Communicable Diseases (NCDs) represent the second-largest share at 25%, reflecting the growing burden of chronic conditions. This is followed by management of other common conditions (20%), Communicable Diseases (6%), Family Planning (4%), and Nutrition (3%). Overall, the pattern highlights Bangladesh's continued prioritization of maternal and child health, while signalling the increasing importance of addressing NCDs and strengthening preventive and primary care services under the ESP framework.

Table 11.5. Social protection program under the MOHFW

Social Protection Program	Ministry / Division	Beneficiary	Budget
Essential Services Delivery & Community-Based Heathcare	Health Services Division	130.00M	12,363.80M
Maternal, Neonatal, Child and Adolescent Health	Health Services Division	63.89M	7,157.70M
National Nutrition Services	Health Services Division	0.21M	1,425.00M
T.B., Leprosy, Communicable and Non-communicable Disease Control	Health Services Division	43.32M	6,945.80M
Clinical Contraception Services Delivery	Medical Education and Family Welfare Division	108.64M	2,960.00M
Family Planning Field Services Delivery	Medical Education and Family Welfare Division	54.66M	5,120.00M
Maternal, Child, Reproductive and Adolescent Health	Medical Education and Family Welfare Division	74.60M	2,350.00M

The MOHFW implements several key social protection programs targeting maternal, child, and community health. The Health Services Division leads major initiatives such as Essential Services Delivery & Community-Based Healthcare (serving 130 million beneficiaries with ৳12,364 million), Maternal, Neonatal, Child and Adolescent Health (৳7,158 million), National Nutrition Services (৳1,425 million), and Disease Control Programs for TB, leprosy, and NCDs (৳6,946 million). The Medical Education and Family Welfare Division manages Clinical Contraception (৳2,960 million), Family Planning Field Services (৳5,120 million), and Maternal, Child, Reproductive and Adolescent Health (৳2,350 million). Collectively, these programs strengthen primary healthcare, family planning, and disease control, advancing Bangladesh's progress toward Universal Health Coverage (UHC).

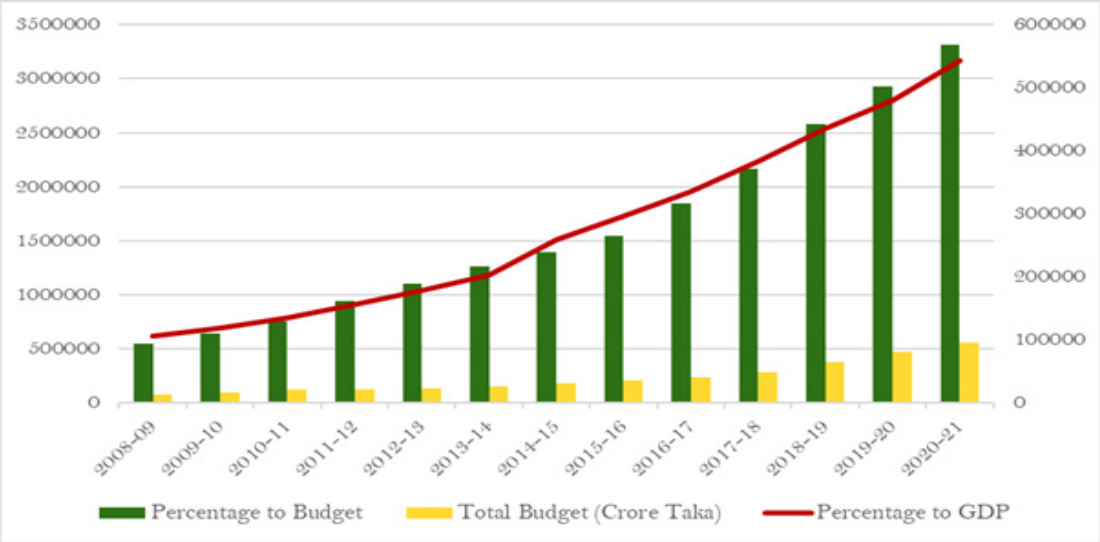

Figure 11.12. Trend in catastrophic health spending in Bangladesh 2008–2021

The graph illustrates the rising trend of catastrophic health spending in Bangladesh from 2008 to 2021. Both the total budget allocation and the share of health spending as a percentage of GDP and total budget have shown steady increases over the years. However, the sharp upward trajectory indicates that more households are facing financial hardship due to health expenses, reflecting a persistent reliance on out-of-pocket payments. Despite economic growth and higher overall spending, the proportion of income spent on healthcare continues to rise, emphasizing the need for stronger financial protection measures—such as expanded health insurance coverage and increased public health investment—to prevent families from falling into poverty due to medical costs.

Interpretation of Key Findings

- Health Financing Structure: Bangladesh's health system remains heavily dependent on private spending, with households contributing nearly 70% of total health expenditure (THE), primarily through out-of-pocket payments (OOP). Public financing accounts for only about 23%, showing limited government investment.
- Public vs. Private Spending: Despite gradual growth in public health budgets, the private sector continues to dominate in both total expenditure and service delivery, particularly in hospital and pharmaceutical spending.
- Pharmaceutical Expenditure: Medicines alone account for the largest share (88.5%)

of pharmaceutical spending, with households financing nearly 94% of total drug costs, indicating a high financial burden on families.

- ESP and Primary Health Care: In 2020, Essential Service Package (ESP) spending represented 48.8% of THE, with the public sector covering 27% and private sector 73%. The majority of ESP expenditure was for Maternal, Neonatal, Child, and Adolescent Health (42%), followed by NCDs (25%), and other common conditions (20%)—reflecting both continued priority on reproductive health and rising chronic disease burden.
- Social Protection Programs: The MOHFW implements multiple social protection programs targeting maternal, child, nutrition, and communicable disease control, but coverage and financing remain limited compared to population needs.
- Catastrophic Health Spending: Catastrophic health expenditure has risen steadily from 2008 to 2021, suggesting that more households are facing financial hardship due to medical costs, despite economic growth.
- Equity Insights: The poorest quintiles spend a higher share of their income on healthcare, especially in rural areas, highlighting inequality in financial protection and the need for stronger public subsidies and prepayment schemes.

Policy Recommendations

- **Increase Health Budget Allocation** Plan for a longer term and gradually raise the health budget to 15% of the national budget or at least 3% of GDP with improved fund utilization.
- **Prepare for Local Financing of Externally Funded Programs** Develop a transition plan to fund critical donor-supported programs like immunization, TB, and family planning.
- **Introduce Strategic Purchasing** Shift from input-based budgeting to performance-linked strategic purchasing and provider-payment reforms.
- **Increase Domestic Revenue Mobilization** Introduce alternative revenue generation through sin taxes (tobacco, alcohol, sugar and beverage), earmarked health levies, and explore innovative financing.
- **Ensure Sustainable Health Financing** Integrate long-term health financing into national planning using progressive taxation and efficiency gains.
- **Public Financial Management (PFM) Reform** Improve fund release, execution, and flexibility in budgeting, including facility-level financial autonomy and undertake effective initiatives to enhance PFM capacity among health administrators/facility managers.
- **Leverage Health Information Systems and Digital Technologies** Digitize financial flows, claims, service tracking, drug inventory systems and electronic prescription mechanisms to improve accessibility, availability, prescribing practices, reduce leakage; overall ensuring accountability and efficiency.
- **Develop a National Benefit Package with Costing** Develop and finalize a costed and explicit Health Benefits Package to guide public investment with a focus on enhancing the Primary Health Care System, Emergency Care and Care of Critical Illnesses.
- **Enhance Local Government Engagement** Enable local governments to co-finance selected health programs with improved capacity and accountability.
- **Institutionalize Health Technology Assessment (HTA)** Introduce operational research and evaluation methods to use HTA for evidence-based decisions on drugs, diagnostics, clinical interventions and other health technologies.
- **Establish a National Health Financing Coordination Platform** Form a dedicated multi-stakeholder platform to monitor the HCFS implementation and align reforms across sectors.

- **Build Capacity for Health Financing Governance** Invest in long-term institutional and human resource capacity to manage health financing reforms effectively, ensuring transparency, accountability, and technical rigour.

Technical Notes

Data Sources

- Health Economics Unit (HEU). Bangladesh National Health Accounts 1997–2020. Ministry of Health and Family Welfare, Government of Bangladesh; 2023.
- Health Economics Unit (HEU). Bangladesh Public Expenditure Review on Health (2020). Ministry of Health and Family Welfare, Government of Bangladesh; 2023.
- An Assessment of Allocation and Utilization of Health Sector Budget (2023). Ministry of Health and Family Welfare, Government of Bangladesh; 2023.
- Health Care Financing Strategy (HCFS) 2012–2032, Ministry of Health & Family Welfare (MoHFW), Bangladesh

Collection Methods

- Survey report
- Annual report
- Bangladesh Govt. Gazettes

Frequency of Updates

- Triennial
- Annual

Quality Assurance

- On-site supervision
- Periodic data audits
- Triangulation of Data

References

- Bangladesh Health Care Financing Strategy (2012-32)
- Bangladesh Health Care Financing Strategy Review Report, 2021
- National Health Policy
- Research done by the Health Economics Unit
- Budgetary gazette of the Bangladesh Govt.

Health-Related SDGs

Executive Summary:

In 2024, Bangladesh continues its steadfast progress toward achieving the health-related Sustainable Development Goals (SDGs). The country's commitment to "Ensure healthy lives and promote well-being for all at all ages" is reflected in significant advancements, despite global challenges such as the COVID-19 pandemic, economic disruptions, and geopolitical tensions, including the Russia-Ukraine conflict.

key achievements

- 3.1.1. Maternal Mortality Ratio (MMR): Reduced from 181 (2015) to 136 per 100,000 live births in 2023. Bangladesh is on track to meet the SDG target of 70 by 2030.
- 3.2.1. Under-5 Mortality: Decreased from 125 per 1,000 live births in 1995 to 33 in 2023, with a target of 25 by 2030.
- 3.2.2. Neonatal Mortality: Declined from 39 per 1,000 live births in 2000 to 20 in 2023, with a target of 12 by 2030.
- 3.3.2, 3.3.4, 3.3.5. Communicable Diseases: Significant reductions in tuberculosis, malaria, and hepatitis B, with continued efforts to meet SDG targets by 2030.
- 3.4.1. Non-Communicable Diseases (NCDs): Mortality from NCDs has remained steady, with a target to reduce premature mortality by one-third by 2030.

Challenges & Targets

- 3.c.1.Health Workforce: Density increased to 12.78 per 10,000 population in 2023, still below the WHO norm of 45.
- 3.8.1. Universal Health Coverage (UHC): The target is to increase essential health service coverage to 80% by 2025.
- 3.9.1. Pollution: Mortality from air pollution remains a significant challenge, with a target reduction by 2025.

Background and Strategic Objectives

Background

Bangladesh has made remarkable progress in achieving the health-related Sustainable Development Goals (SDGs). As of 2024, the country has successfully reduced maternal mortality, under-5 mortality, and neonatal mortality, showing significant strides toward meeting SDG 3 targets. Despite facing global challenges such as the COVID-19 pandemic, economic disruptions, and geopolitical issues, including the Russia-Ukraine conflict, Bangladesh remains committed to addressing health challenges and improving health outcomes for all. The Government of Bangladesh has also adopted a "whole-of-society" approach, prioritizing marginalized and vulnerable populations to ensure no one is left behind in the pursuit of SDGs.

Strategic Objectives

- Reduce Maternal Mortality (MMR):
  Target: Reduce MMR to less than 70 per 100,000 live births by 2030. Focus on increasing skilled birth attendants, especially in rural areas.
- Lower Under-5 Mortality:
  Target: Reduce under-5 mortality to 25 per 1,000 live births by 2030. Expand child health services and improve vaccination.
- Reduce Neonatal Mortality:
  Target: Achieve a neonatal mortality rate of 12 per 1,000 live births by 2030. Strengthen neonatal care and prenatal/postnatal services.
- Address Communicable Diseases:
  Target: End epidemics of AIDS, tuberculosis,

malaria, and NTDs by 2030. Focus on prevention, early detection, and treatment access.

- Combat Non-Communicable Diseases (NCDs): Target: Reduce NCD-related mortality by one-third by 2030. Focus on prevention and lifestyle interventions.
- Strengthen Health Workforce & UHC: Target: Increase health workforce density to meet WHO norms and achieve UHC by 2025.
- Pollution Control: Target: Reduce deaths caused by air and water pollution by 2025. Focus on strengthening air-quality management, safe water systems, and waste disposal.
- Health Financing & Infrastructure: Target: Increase health sector funding to USD 400 million by 2025 for infrastructure and services. Focus on reducing out-of-pocket expenditures.

Current Status and Trends

Bangladesh has made significant progress toward health-related SDG 3 targets. Despite advances, challenges remain to meet 2025 and 2030 goals.

Infrastructure

- Health workforce density: 12.78 per 10,000 population (2023), still below WHO recommendation of 45/10,000.
- Health facilities: Improved district and sub-district hospitals; rural areas still underserved.
- Health information systems: Growth in digital health management and telemedicine services.

Service Providers

- Increased number of doctors, nurses, and technologists in both public and private sectors.
- Community health workers play key roles in rural healthcare delivery.

Major Services Provided

- Maternal and child health services improved (safe deliveries, immunization).
- Control programs for tuberculosis, malaria, HIV/AIDS, hepatitis, and neglected tropical diseases are ongoing.
- Non-communicable diseases (NCDs) and mental health services are expanding.

Medicines and Vaccines

- 86% full vaccination coverage among children (2018); target 98% by 2025.
- Significant increase in funding for medical research and vaccine development (from $177.4 million in 2015 to $1748.68 million in 2022).

Information Systems

- Enhanced digital health records and management systems.
- International Health Regulations (IHR) capacity score at 71 (2023), below the 2025 target of 95.
- Rising catastrophic health expenditure among households (3.46% in 2022 spent >10% of income on health).

Key Indicators

Table 12.1. Targets vs achievements of SDG indicators

Indicator	Latest Data	Target (2025/2030)
Maternal Mortality Ratio (per 100,000 live births)	136 (2023)	100 / 70
Skilled birth attendance (%)	69.68% (2020)	As high as possible
Under-5 Mortality Rate (per 1,000)	33 (2023)	27 / 25

Table 12.1. contd.

Table continued...		
Indicator	**Latest Data**	**Target (2025/2030)**
Neonatal Mortality Rate (per 1,000)	20 (2023)	14 / 12
HIV incidence (per 1,000)	0.006 (2022)	0.01
Tuberculosis incidence (per 100,000)	221(2023)	112 / 45
Malaria incidence (per 1,000)	0.0487 (2023)	0.09 / 0
Hepatitis B incidence (per 100,000)	0.51 (2022)	0.7
NCD mortality (%)	24 (2023)	10%
Suicide rate (per 100,000)	8.8 (2023)	3.5
Road traffic deaths (per 100,000)	10.01 (2023)	2 (2022), 1.5 (2025), 1.2 (2030)
Family planning coverage (%)	72.88% (2023)	80%
Fully vaccinated children (%)	86% (2018)	98%
Health worker density (per 10,000)	12.78 (2023)	45
IHR capacity score	71 (2023)	95
Households with >10% income on health	3.46% (2019)	Reduce

Interpretation of Key Findings

- Progress: Significant declines in maternal, neonatal, and child mortality; improved immunization and disease control.
- Challenges: Low health workforce density, high out-of-pocket health expenses, and urban-rural disparities in service access.
- Outlook: To meet SDG targets, continued investment in healthcare infrastructure, workforce, digital health, and financial risk protection is essential.

Program Implementation Highlights

- Maternal & Child Health: Skilled birth attendance at 69.68% (2023); full child vaccination at 86% (2018); programs to reduce neonatal and under-5 mortality ongoing (2023).
- Disease Control: TB incidence down to 221/100,000 (2023); malaria reduced to 0.0487/1,000 (2023); HIV/AIDS rates remain low; NTD treatment expanded (2023).
- NCD & Mental Health: NCD mortality at 24% (2023); mental health and substance abuse services expanded with 30,000+ treated in 2020 (2023).
- Health System: Workforce density improved to 12.78/10,000 (2023); digital health systems enhanced; emergency preparedness remains below target (58/100 in 2019) (2023).
- Funding: Medical research aid rose from $177.4 million (2015) to $1748.68 million (2022); efforts to reduce out-of-pocket costs are ongoing (2022, 2023).
- Family Planning: 72.88% women (15-49) use modern methods (2020); adolescent birth rates declined significantly (2023).

Recommendations

Policy Recommendations

- Enhance financial protection by reducing out-of-pocket expenditures through insurance schemes, public financing, and targeted subsidies.
- Promote equitable access to quality healthcare by strengthening rural infrastructure and implementing fair, needs-based workforce distribution policies.
- Integrate non-communicable diseases (NCDs) and mental health into mainstream national health plans and service delivery frameworks.

- Scale up family planning coverage to achieve at least 80% utilization by 2025, ensuring accessibility across all population groups.
- Advance health security and emergency preparedness in line with WHO International Health Regulations (IHR) benchmarks.

Operational Improvements

- Expand continuous professional development programs for health workers to improve clinical competency and service quality.
- Accelerate digital transformation through nationwide expansion of DHIS2, telemedicine, and hospital information systems for improved efficiency and data use.
- Strengthen national disease control programs for tuberculosis, malaria, HIV/AIDS, and neglected tropical diseases to sustain progress toward elimination goals.
- Enhance maternal, neonatal, and child health services through integrated outreach, community-based interventions, and immunization coverage expansion.
- Reinforce the medical logistics and supply chain system to ensure uninterrupted availability of essential medicines, vaccines, and medical supplies.

Resource and Capacity Development

- Increase the health workforce in alignment with WHO density standards and ensure balanced deployment across all facility tiers.
- Invest in health infrastructure modernization, prioritizing rural hospitals and newly established medical college facilities.
- Mobilize sustainable domestic and international financing to support the operationalization of strategic health programs.
- Build institutional capacity for emergency response and disaster preparedness, including functional Emergency Operations Centers at national and district levels.

Technical Notes

Data Sources

- Primary data from Bangladesh Bureau of Statistics (BBS), Directorate General of Health Services (DGHS), and Bangladesh Health SDG Tracker.
- Supplementary data from WHO, UNICEF, World Bank, and international surveys.

Collection Methods

- Household surveys including Multiple Indicator Cluster Survey (MICS) and Bangladesh Demographic and Health Survey (BDHS)
- Health facility reporting via Health Management Information System (HMIS)
- Routine surveillance for communicable and non-communicable diseases

Frequency of Updates

- Annual reporting for key health indicators and program performance
- Periodic updates from ongoing surveys and special studies (typically every 3-5 years)

Quality Assurance

- Data validation through cross-checking with multiple sources and field audits
- Use of standardized definitions and international classifications to ensure comparability
- Regular training of data collectors and supervisors for accuracy

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4. BDHS 2017-18 & 2020, NIPORT
5. MICS Bangladesh, 2019
6. Bangladesh SDG Tracker, 2022-2024
7. World Bank Health Reports, 2015-2024

Achievements and Developments in Health

Executive Summary

Bangladesh has experienced a sustained transformation in population health, service delivery, and health system capacity over the past four decades. The population has more than doubled since 1981, reaching 173 million in 2023, while fertility and birth rates have declined to near replacement levels. Life expectancy has improved markedly to 72.3 years, reflecting enhanced access to healthcare, nutrition, and living conditions.

Economic growth has been equally strong, with per capita GDP increasing nearly ninefold since 1990, enabling large-scale investments in healthcare infrastructure and human resources. Outpatient and inpatient service utilization in government facilities has risen significantly, alongside a major surge in service-seekers at community clinics—confirming public trust in primary healthcare. Immunization coverage has reached near-universal levels, cementing Bangladesh's global reputation for successful EPI implementation.

Health system capacity expanded notably through the growth of medical colleges, hospital beds, and registered professionals. However, despite quantitative gains, the health workforce composition remains below WHO-recommended ratios, with a shortage of nurses and allied health professionals compared to physicians. Quality of care, workforce distribution, and efficiency of service delivery remain areas needing stronger policy focus.

Background and Strategic Objectives

Background

Over the past five decades, Bangladesh has made remarkable progress in the health sector, transforming from a resource-constrained system into one recognized globally for innovation and impact. The country now provides healthcare services to nearly 171 million people, achieving notable outcomes despite limited resources.

Significant progress in the last two decades includes the expansion of the national health service network, infrastructure modernization, and increased health workforce density, which have strengthened service delivery, emergency response, and digital integration. Investments in operation theatres, critical care units, and advanced diagnostic technologies have enhanced tertiary care capacity nationwide.

Ongoing health system reforms emphasize digital transformation through initiatives such as the Shared Health Record, Unique Health ID, and integration of birth and death notifications with BDRIS via DHIS2. Tools like Smart Verbal Autopsy, digital supervision checklists, and the 'Smart Health BD' app reflect a shift toward data-driven management.

Bangladesh maintains over 83% full immunization coverage, remains polio- and tetanus-free, and achieved rubella control in 2018. The HPV vaccination launched in 2023 reached a 74.5% success rate, with Rota vaccine introduction planned.

These developments underscore Bangladesh's commitment to equitable healthcare access, digital innovation, and the pursuit of UHC and SDG goals.

Strategic Objectives

- Expand and modernize medical colleges, specialized hospitals, and community clinics to ensure equitable access to quality healthcare across all divisions and districts.
- Establish a unified health information ecosystem through Shareable Health Records, Unique Health IDs, and interoperability between DHIS2, BDRIS, and hospital automation systems.

- Increase the number and distribution of skilled healthcare professionals through continuous education, digital training platforms, and equitable placement policies.
- Ensure round-the-clock availability of critical services, including emergency care and maternal-child health, supported by modern equipment and efficient referral systems.
- Sustain high immunization coverage, expand HPV and strengthen disease surveillance, outbreak response, and community awareness.
- Scale up smart digital applications, telemedicine, and automated supervision tools to improve efficiency, accountability, and patient-centred service delivery.
- Integrate all health system reforms within a unified framework aimed at achieving Universal Health Coverage and measurable progress toward Sustainable Development Goals.

Trends of Achievements and Developments of Health Status in Bangladesh

Bangladesh has demonstrated remarkable progress in improving health status and expanding healthcare infrastructure over the past decade. Continuous investments in both primary and tertiary care have strengthened the overall system, leading to measurable improvements in access, coverage, and health outcomes.

Key Indicators

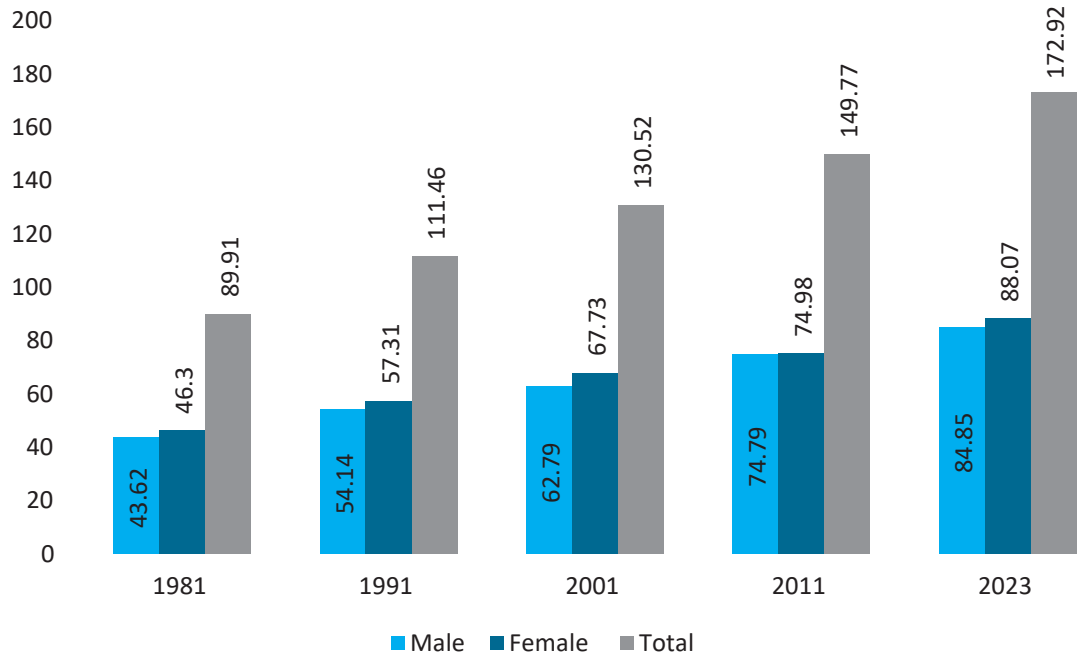

Figure 13.1. Trends of population of Bangladesh over the years with male-female proportion (million)

The total population of Bangladesh has more than doubled from about 90 million in 1981 to nearly 173 million in 2023, showing steady growth over the decades. The female population has consistently remained slightly higher than the male population, indicating a balanced gender distribution. Overall, the trend reflects sustained population expansion with gradual progress toward gender parity.

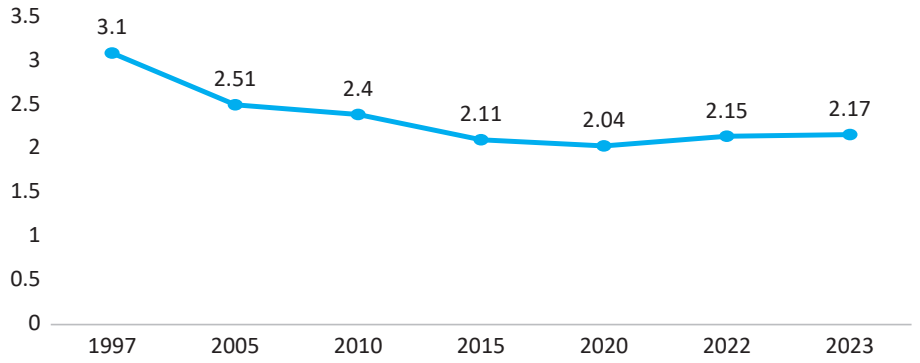

Figure 13.2. Trends of total fertility rate (births per woman aged 15-49) over the years

The total fertility rate in Bangladesh has declined steadily from 3.1 births per woman in 1997 to around 2.1 in 2023, indicating a major demographic transition toward replacement-level fertility. The slight rise after 2020 suggests stabilization, reflecting improved family planning coverage and changing reproductive behaviour.

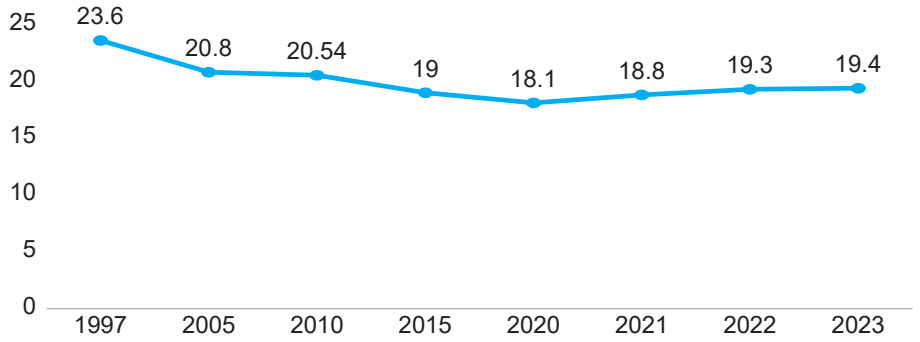

Figure 13.3. Trends of crude birth rate (per 1000 population) over the years.

The crude birth rate in Bangladesh declined from 23.6 per 1,000 population in 1997 to 18.1 in 2020, reflecting improvements in fertility control and maternal health services. Since 2020, the rate has shown slight stabilization around 19 births per 1,000, indicating that the country is nearing a steady population growth phase.

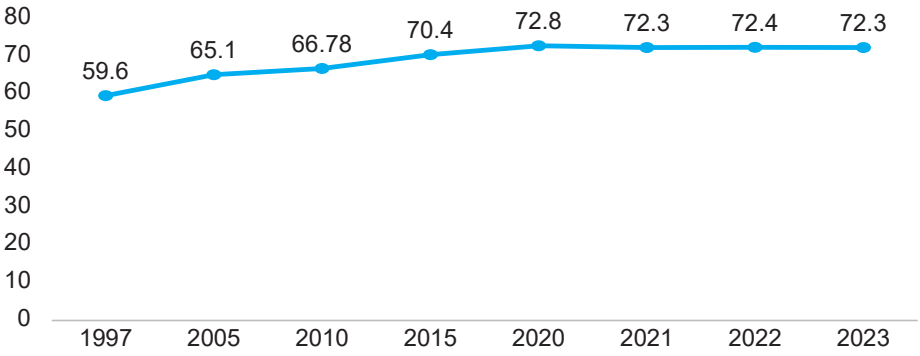

Figure 13.4. Trends of life expectancy at birth (years) over the years

Life expectancy at birth in Bangladesh has increased markedly from 59.6 years in 1997 to 72.3 years in 2023, reflecting major improvements in healthcare, nutrition, and living conditions. The trend has remained stable since 2020, indicating sustained gains in population health and longevity.

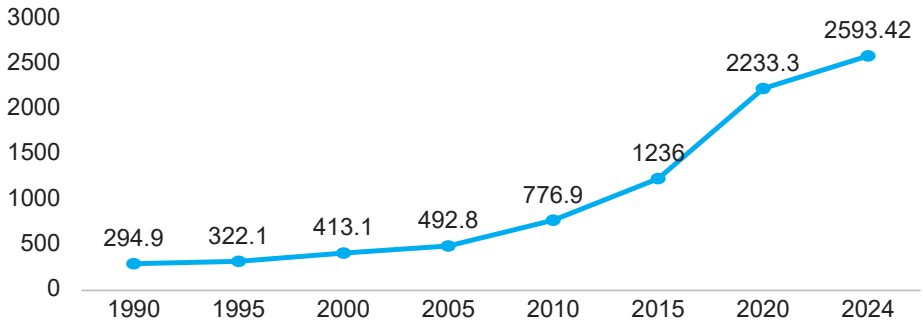

Figure 13.5. Trends of per capita GDP (USD) over the years

Bangladesh's per capita GDP has shown remarkable growth—from USD 294.9 in 1990 to USD 2,593.4 in 2024—reflecting strong economic progress over the past three decades. The sharp rise after 2015 highlights accelerated industrialization, export growth, and improved socioeconomic conditions.

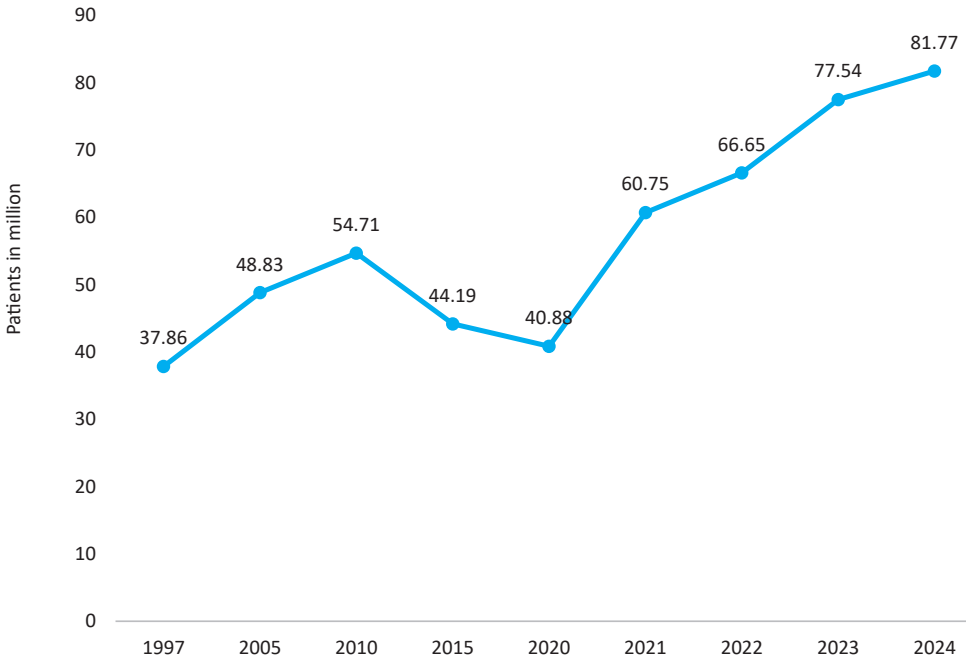

Figure 13.6. Trends of the number of patients (in million) treated in the OPD of government hospitals over the years

The number of patients treated in government outpatient departments (OPD) shows a strong upward trend—from 37.9 million in 1997 to 81.8 million in 2024. After moderate fluctuations between 2010 and 2020, OPD visits rose sharply post-2020, reflecting the restoration of routine services and growing public reliance on government health facilities.

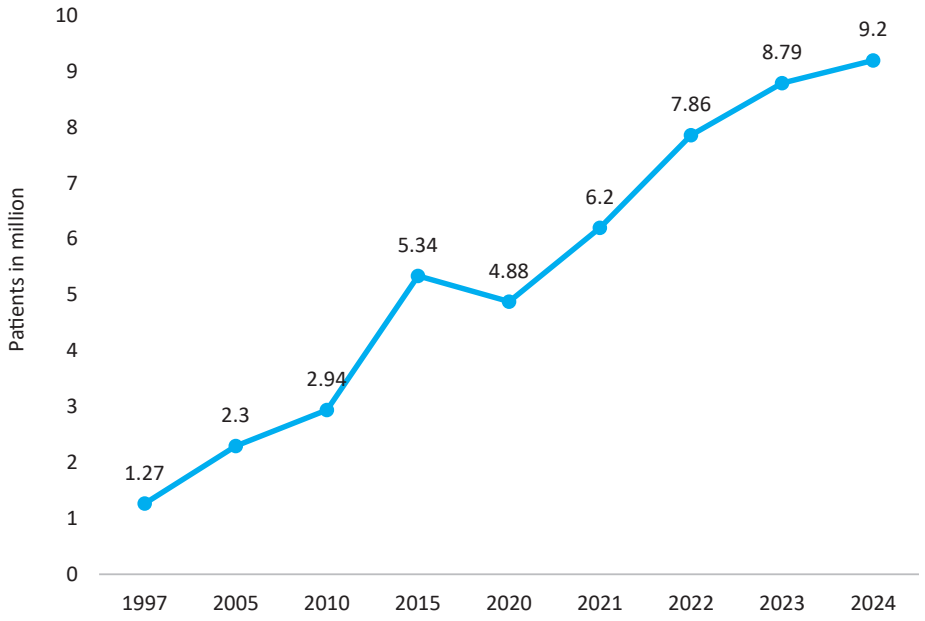

Figure 13.7. Trends of the number of patients (in million) treated in the IPD in the government hospitals over the years

The number of patients treated in the inpatient department of government hospitals increased steadily from 1.27 million in 1997 to 9.2 million in 2024. The consistent rise, particularly after 2020, highlights expanded hospital capacity and improved utilization of inpatient services across the country.

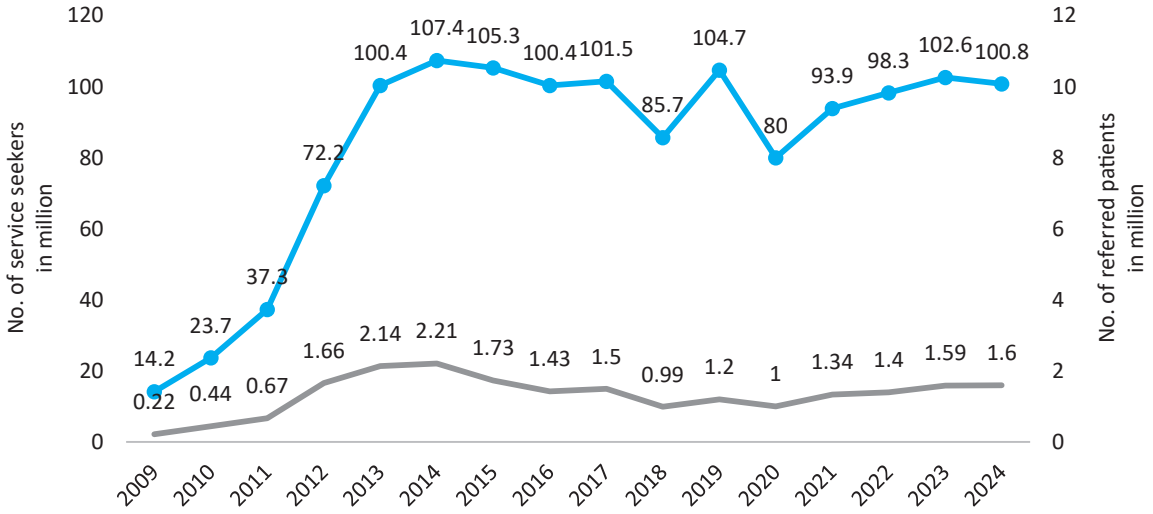

Figure 13.8. Trends of the number of service-seekers and referred patients (in million) in community clinics over the years

The number of service-seekers at community clinics increased sharply from 14.2 million in 2009 to around 100 million in 2024, showing the growing importance of these facilities in primary healthcare delivery. The number of referred patients also rose gradually from 0.22 million to 1.6 million, reflecting improved referral linkages and utilization of higher-level health services.

Table 13.1. Comparison of valid vaccination coverage in 2006, 2019 and 2023			
EPI coverage (crude)	**2006**	**2019**	**2023**
BCG	98%	99.80%	98.8%
MCV1/MR1	78%	91.70%	95.5%
MCV2/MR2	94%	98.10%	93.1%
TT2/Td2	94%	97.10%	92.6%
TT3/Td3	19%	87.70%	85.6%
OPV3	92%	93.30%	97.7%
Fully immunized children	71%	83.90%	95.2%

EPI crude coverage in Bangladesh has shown substantial improvement between 2006 and 2023 across most antigens. BCG and OPV3 maintained consistently high coverage above 95%, while MCV and TT/Td series demonstrated remarkable gains, reflecting stronger routine immunization performance. The proportion of fully immunized children increased notably from 71% in 2006 to 95.2% in 2023, indicating near-universal vaccination coverage.

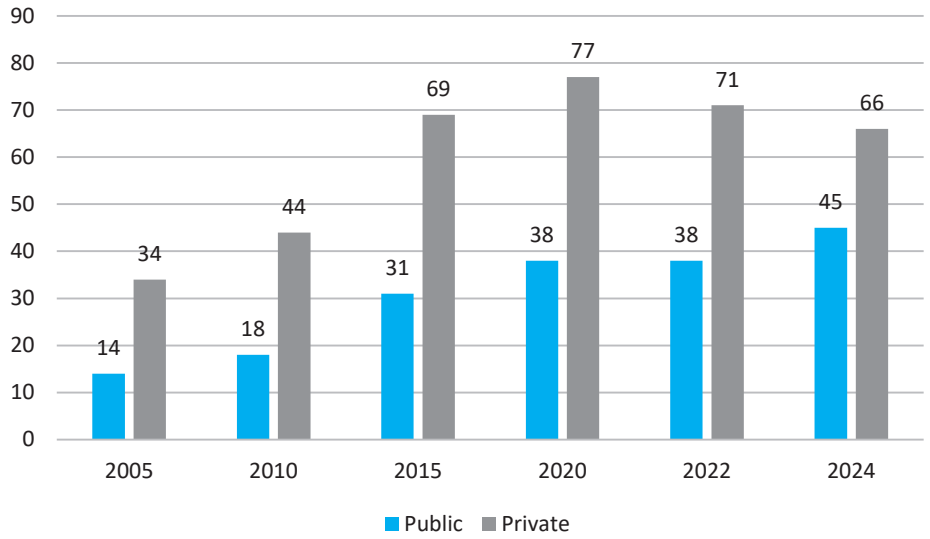

Figure 13.9. Numbers of medical colleges established (Govt. & Pvt.) over the years

The number of medical colleges in Bangladesh has increased steadily over time, with public institutions rising from 14 in 2005 to 45 in 2024 and private institutions from 34 to 66 in the same period. The continuous growth, particularly in the private sector, reflects expanding investment in medical education and growing demand for healthcare professionals nationwide.

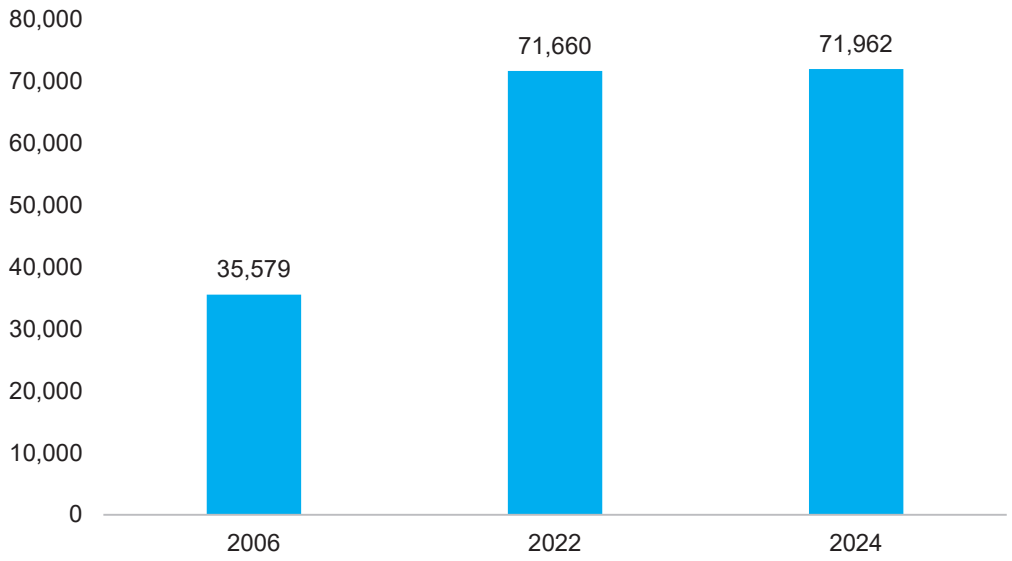

Figure 13.10. Numbers of hospital beds (Govt.) over the years

The number of hospital beds in Bangladesh has doubled from 35,579 in 2006 to 71,962 in 2024, reflecting significant expansion of healthcare infrastructure. The slight increase since 2022 indicates continued investment to enhance service capacity and meet growing healthcare demands.

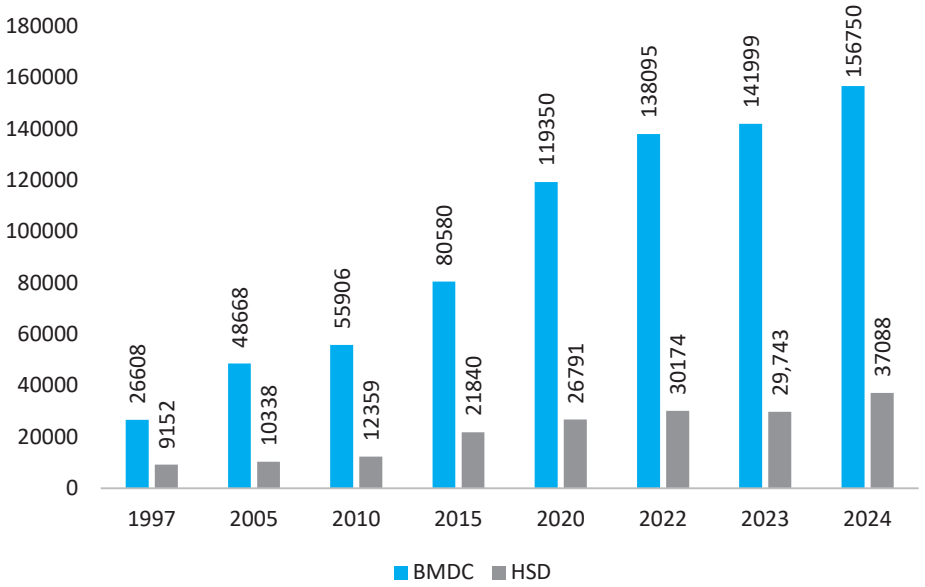

Figure 13.11. Numbers of BMDC registered and Health Service Division physicians over the years

The number of registered physicians under BMDC rose sharply from 26,608 in 1997 to 156,750 in 2024, while physicians under the Health Service Division increased from 9,152 to 37,088 over the same period. This steady rise demonstrates Bangladesh's expanding medical workforce capacity, reflecting continuous investment in medical education and recruitment to strengthen the national health system.

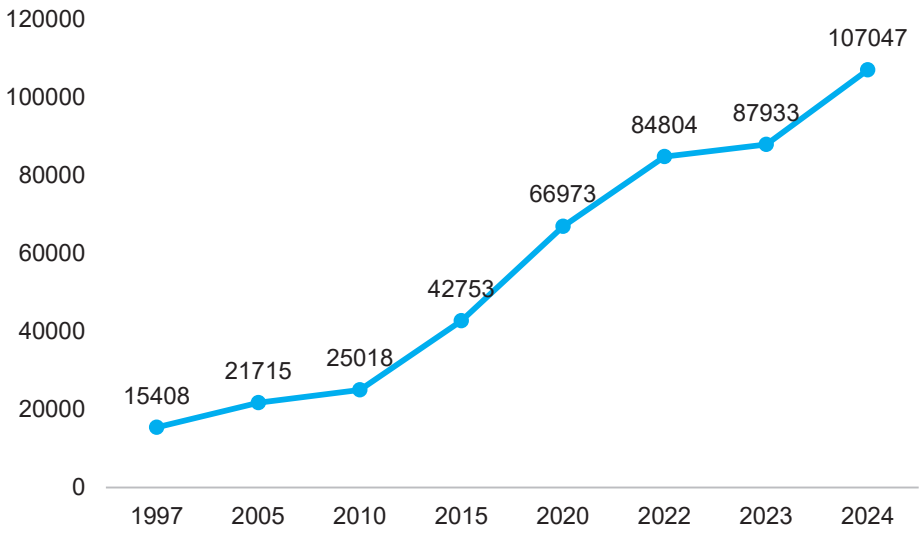

Figure 13.12. Trends of the number of registered nurses over the years

The number of registered nurses in Bangladesh has risen steadily from 15,408 in 1997 to 107,047 in 2024, marking a significant expansion of the nursing workforce. This consistent growth reflects increased training capacity and recruitment initiatives aimed at strengthening healthcare delivery and addressing workforce gaps nationwide.

Figure 13.13. The Health and Family Welfare Advisor, Nurjahan Begum, inaugurated the Robotic Rehabilitation Center at Bangladesh Medical University in Dhaka, established with support from the Government of China. Professor Dr. Md. Sayedur Rahman, Special Assistant (State Minister), Ministry of Health and Family Welfare, along with the Ambassador of China to Bangladesh, attended the event.

Interpretation of Key Findings

Bangladesh has undergone a significant demographic and health transformation over the past four decades. The population has more than doubled since 1981, reaching 173 million in 2023, with a nearly balanced sex ratio. Fertility and birth rates have declined to replacement levels, while life expectancy rose from 59.6 years in 1997 to 72.3 years in 2023, reflecting effective family planning, improved healthcare access, and better living conditions.

Economic growth has been robust, with per capita GDP increasing from USD 295 in 1990 to USD 2,593 in 2024, supporting investments in health infrastructure and services. Utilization of government facilities expanded markedly—OPD visits increased to 81.8 million and inpatient admissions to 9.2 million in 2024. Community clinics now serve about 100 million clients annually, strengthening primary healthcare and referral networks.

Immunization coverage reached near-universal levels, with 95% of children fully vaccinated in 2023, indicating a well-functioning EPI program. Health system capacity also grew substantially: hospital beds doubled since 2006, medical colleges expanded, and the health workforce increased sharply, with over 156,000 registered physicians and 107,000 nurses by 2024.

Collectively, these trends highlight Bangladesh's steady progress toward universal health coverage, supported by demographic stability, economic advancement, and sustained investment in public health infrastructure and human resources.

Recommendations

Policy Recommendations

1. Population Stabilization and Aging Preparedness

- □ Strengthen the national demographic transition policy to address emerging challenges from slowing fertility and increasing life expectancy.
- □ Develop a Healthy Ageing Strategy, integrating NCD management, geriatric care, and social protection for the elderly population.
- □ Prevent child marriage and develop birth spacing policies, especially in high-fertility rural pockets.

2. Quality and Equity of Health Services

- □ Shift national focus from service volume to service quality and outcomes, embedding quality assurance, patient safety, and satisfaction indicators in hospital performance frameworks.
- □ Address rural–urban and public–private disparities through equitable resource allocation and performance-linked financing.
- □ Introduce regulatory oversight for private healthcare to standardize medical education, pricing, and clinical quality.

3. Health Workforce Distribution and Skill Mix

- □ Formulate a National Health Workforce Planning Framework to balance physician-to-nurse ratios and ensure equitable deployment across districts.
- □ Institutionalize continuing professional development for both doctors and nurses.

Operational Recommendations

1. Primary and Community Health Services

- □ Enhance the service package of community clinics to ensure routine NCD screening, elderly check-ups, and adolescent health services.
- □ Strengthen referral systems with electronic linkages from community clinics to higher facilities to reduce fragmentation.

- □ Ensure uninterrupted supply of essential drugs and vaccines through real-time stock monitoring.

2. Hospital Service Quality and Efficiency

- □ Implement standardized triage and patient-flow systems in high-volume hospitals to reduce overcrowding.
- □ Launch facility-based audit cycles on infection control, maternal deaths, and medication errors.

3. Workforce Deployment and Capacity Building

- □ Expand nurse-led outpatient and triage roles to reduce physician overload and improve patient flow.
- □ Scale up nursing education institutions and upgrade training infrastructure, particularly in underserved divisions.
- □ Adopt the WHO threshold of 44.5 health workers (doctors, nurses, others) per 10,000 population as a national target, revising the Human Resources for Health (HRH) policy accordingly.

4. Health Financing and Resource Allocation

- □ Introduce performance-based budgeting for district hospitals and community programs.
- □ Pilot public–private contracting for diagnostics and emergency transport in low-capacity areas.
- □ Develop a costed investment plan for infrastructure maintenance, ensuring functional hospital equipment and bed utilization.

Technical Notes

Data Sources

a. Population & vital statistics: Bangladesh Bureau of Statistics (BBS), Sample Vital Registration System (SVRS).

b. Health service indicators: DHIS2 Hospital Module, Management Information System (MIS), DGHS.

c. Immunization: DHIS2, Expanded Programme on Immunization (EPI).

d. Human resources: Bangladesh Medical & Dental Council (BMDC), Directorate General of Nursing & Midwifery (DGNM).

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July Mass Uprising, 2024

Executive Summary

The July 2024 uprising in Bangladesh began as a student-led demand to reform the quota system in government jobs, sparking continuous protests from July 1 onward. What started as peaceful demonstrations quickly escalated into violent confrontations by mid-July, culminating in a nationwide movement that reshaped the country's political landscape. On July 15, clashes between protesters and security forces intensified, leading to widespread unrest, mass arrests, and prolonged internet shutdowns. The turmoil ultimately forced the resignation of former Prime Minister Sheikh Hasina and paved the way for the establishment of an interim government.

The human cost of the uprising was devastating: several hundred lives were lost, and thousands sustained injuries ranging from trauma and burns to gunshot wounds. Hospitals across the country faced overwhelming patient loads, with emergency wards operating far beyond capacity. Shortages of medical supplies, blood, and trained personnel compounded the crisis, while disrupted communication networks hindered coordination of relief efforts. Despite these challenges, Bangladesh's healthcare system mobilized rapidly deploying doctors, nurses, and volunteers, expanding emergency services, and coordinating with humanitarian organizations to provide urgent care.

This unprecedented strain on the health sector highlighted both its resilience and its vulnerabilities. The uprising underscored the critical importance of emergency preparedness, robust supply chains, and mental health support for victims and frontline workers alike. As Bangladesh moves forward, the lessons learned from July 2024 serve as a reminder that healthcare systems must be equipped not only for routine demands but also for sudden, large-scale national crises.

Background

Formation of National Committee

In the aftermath of the July 2024 Mass Uprising, the newly established interim government prioritized documenting the human toll of the crisis. To ensure transparency and accuracy, a 13-member National Committee was constituted with the mandate to prepare an official list of injured and martyred individuals. The committee was convened by former secretary Mr. Mohammad Humayun Kabir, whose administrative experience and credibility provided a strong foundation for the initiative.

Between August and early September 2024, the committee held four consultative meetings with a wide range of stakeholders, including student leaders, medical coordinators, civil society representatives, and regional administrators. These meetings focused on establishing clear definitions of "injured" and "martyred," setting verification protocols, and identifying gaps in existing records. The committee emphasized the importance of cross-checking hospital data, police reports, and eyewitness accounts to avoid duplication or omission.

A significant challenge identified during these consultations was the lack of a centralized data management system. Given the scale of casualties and the diversity of reporting sources, manual record-keeping proved inadequate. As a result, the committee recommended the development of specialized software capable of integrating hospital admissions, death certificates, and field-level reports into a unified database. This digital solution was seen as essential not only for accuracy but also for long-term archiving and policy planning.

The formation of the National Committee marked a crucial step toward institutional accountability. By documenting the human impact of the uprising, the committee aimed to provide

recognition to victims and their families, guide compensation and rehabilitation programs, and strengthen the country's capacity to respond to future national emergencies.

Software Development and Data Collection

The Medical Information Portal (medical-info.dghs.gov.bd/public) was developed and is maintained by the Directorate General of Health Services (DGHS) under the instruction of the Health Services Division, Ministry of Health and Family Welfare.

Only hospitals and health facilities are authorized to upload data into the system. This includes detailed information such as patient addresses, injury descriptions, and relatives' contact details. Once uploaded, the district committee verifies the records, and only verified entries are published in the official death and injured gazette.

The portal features a public dashboard where citizens can search the gazette using patient or facility criteria. To view full details, users must log in. For injured individuals, using their mobile number as a unique identifier, injured individuals receive a secure link through which they can upload essential documents and information. The required uploads include:

- A personal photograph
- National Identity (NID) card image
- Birth registration certificate image
- Educational certificate image
- Profession-related information

Once these documents are submitted, the system internally generates a digital health card. This card is then printed and physically distributed to the injured persons by the Health Services Division,

Figure 14.1. Login page of July Mass Uprising, 2024 software

Ministry of Health and Family Welfare, serving as official proof of their verified identity and injury classification.

Additionally, the portal includes reporting functions that allow generation of admitted patient lists and injury-wise patient statistics, supporting both transparency and healthcare planning.

Formation of District Committee

- Each district formed a committee to verify the information, chaired by the respective Deputy Commissioner and with the Civil Surgeon as Member Secretary.
- Committee Composition:
  - Deputy Commissioner – Chairperson

- Superintendent of Police – Member
- Director/Superintendent, Medical College Hospital/District Hospital – Member
- Upazila Nirbahi Officer – Member
- Deputy Director, Department of Social Services – Member
- 2 Anti-discrimination student coordinators – Members
- Upazila Health & Family Planning Officer – Member
- Civil Surgeon – Member Secretary

Verification and categorization

District Committees verified the data submitted from hospitals and civil surgeon offices. Under the directives of the Health Services Division, injured were classified based on injury severity. Initially, 4 categories were considered, but later revised to 3 categories in a meeting chaired by Special Assistant Prof. Dr. Md. Sayedur Rahman.

Table 14.1. Different categories of injuries with their definitions.

Sl. No.	Category	Description
1	Category A	Critically injured - those who need lifelong support to be covered (at least one eye/hand/foot damaged and unfit for independent living, completely blind, completely mentally disabled and unable to work or similar injured person.
2	Category B	Seriously injured - those who need long-term assistance (partially blind, severely brain-injured or similar injured persons.
3	Category C	-Injured people who are still undergoing treatment in the hospital will be able to perform normal activities after treatment (hearing/vision impaired, gunshot wounds or similar injuries). -Injured people who have already recovered and left the hospital and can perform normal activities.

Figure 14.2. The victory celebration of the Bangladeshi people's one point of movement.

Current Status

Gazette Publication:

Only verified data were considered eligible for gazette publication. The gazette is published by the Ministry of Liberation War Affairs, based on data collected and processed through the Management Information System (MIS) of DGHS.

The MIS team ensures data integrity by performing several checks before submission, including:

1. Confirming that injury categories are properly updated.
2. Detecting duplicate entries using NID, BRN, or mobile numbers.
3. Applying additional duplication control mechanisms.
4. Verifying that all required information is complete; if not, the concerned authority is notified.

Once these checks are completed, the verified dataset is forwarded to the Health Services Division, Ministry of Health & Family Welfare, which then transmits the records to the Ministry of Liberation War Affairs for gazette publication.

In the first phase, 834 death records and 12,043 injury records were submitted for gazette publication. Subsequently, an additional 10 death records and 1,757 injury records were verified and published, bringing the total to the officially gazetted figures.

Table 14.2. The total number of gazetted deaths and injured (up to 24 July 2025).

SL No.	Type of Gazette	Category	Area	Number
01	Death	-	All Division	844
02	Injured	A	All Division	602
03		B	All Division	1118
04		C	Dhaka Division	3503
			Chattogram Division	2153
			Rangpur Division	1405
			Khulna Division	1361
			Rajshahi Division	1329
			Barishal Division	888
			Sylhet Division	796
			Mymensingh Division	645

Category Review Committee

- Following the publication of the gazette, issues arose regarding the accuracy of injury and death categories. To address these concerns, the Health Services Division established a Category Review Committee, chaired by the Vice-Chancellor of Bangladesh Medical University.

Applications for category revision are not submitted individually. Instead, they are formally raised by government hospitals and district committees, accompanied by resolutions and proper clinical documentation. These applications are collected by the Directorate of the July Mass Uprising (formerly the Mass Uprising Special Cell) and then placed before the Category Review Committee for examination.

The committee carefully reviews each case, verifies medical evidence, and provides decisions on necessary corrections. To date, more than 600 categories have been updated, and the review process remains ongoing to ensure accuracy and fairness in official records

Committee Structure

- Vice-Chancellor, BMU – Chairperson
- Commandant, CMH Dhaka – Member

Figure 14.3. The Health and Family Welfare Advisor Nurjahan Begum visited the National Institute of Traumatology and Orthopaedic Rehabilitation (NITOR) in Dhaka to check on students injured during the anti-discrimination movement who are receiving treatment. The British High Commissioner was also present during the visit.

- Director, Dhaka Medical College Hospital – Member
- Director, National Institute of Traumatology and Orthopaedic Rehabilitation (NITOR)– Member
- National Institute of Ophthalmology (NIO) – Member
- Director General, July Mass Uprising Department – Co-opt Member
- Joint Secretary, Ministry of Liberation War Affairs – Co-opt Member
- Director, Hospital & Clinics, DGHS – Co-opt Member
- Director, MIS, DGHS – Member Secretary

Impact of the July 2024 Mass Uprising on the Health System and Emergency Response

The July Mass Uprising of 2024 was not only a political watershed moment—culminating in the resignation of the Prime Minister and the installation of an interim government—but also a profound test of Bangladesh's healthcare system. The scale of human suffering was immense: 844 deaths and 13,800 injuries were officially

recorded, ranging from gunshot wounds and blunt trauma to burns and psychological distress. Hospitals across the country, particularly in Dhaka and other major cities, were inundated with patients far beyond their normal capacity. Emergency wards operated continuously, often with shortages of beds, blood supplies, and critical medicines.

Despite these constraints, the health sector demonstrated remarkable resilience. Government hospitals, private facilities, and volunteer medical teams mobilized rapidly to provide urgent care. Field-level clinics were converted into makeshift trauma centres, and medical students were deployed to assist with triage and first aid. The Health Services Division and DGHS introduced digital platforms to collect, verify, and manage casualty data, ensuring transparency and accountability in reporting. These systems allowed for the creation of official gazettes listing the dead and injured, and facilitated the issuance of health cards to victims for access to rehabilitation and support services.

The crisis, however, exposed critical gaps in emergency preparedness. Many hospitals lacked specialized trauma units, and coordination between civil administration, law enforcement, and health facilities was often delayed. Communication breakdowns during internet shutdowns further complicated patient referrals and supply chain management. Mental health support for victims and frontline workers was limited, underscoring the need for integrated psychosocial care in future emergencies.

In retrospect, the uprising highlighted both the strengths and vulnerabilities of Bangladesh's health system. While the rapid deployment of data systems and the dedication of healthcare professionals showcased resilience, the experience underscored the urgent need to strengthen disaster preparedness, trauma care infrastructure, supply chain robustness, and inter-agency coordination. These lessons remain vital for building a health system capable of withstanding future national crises.

Technical Notes:

- A centralized online platform (https://medical-info.dghs.gov.bd) was developed by MIS, DGHS for real-time data collection on injuries and deaths.
- District-level committees, led by Deputy Commissioners and Civil Surgeons as a member secretary, verified submitted data using standardized protocols.
- Injuries were classified into three categories (A, B & C) based on severity, as per Health Services Division directives.
- Only verified cases were included in the official gazette. In first phase, 834 death data and 12043 injury data published. In second phase, 10 death data and 1757 injured data pulished as gazette.
- A national review committee—chaired by the Vice-Chancellor of Bangladesh Medical University and with the Director of MIS, DGHS as Member Secretary—was established to handle reclassification requests supported by clinical documentation.

References

- Directorate General of Health Services (DGHS) – July-August Student Protest Data: https://medical-info.dghs.gov.bd/
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- National and International Newspaper Reports
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Management Information System
Directorate General of Health Services
Mohakhali, Dhaka 1212, www.dghs.gov.bd