

# Bangladesh

# Health Facility Survey 2014

# FINAL REPORT











# Bangladesh Health Facility Survey 2014

# **Final Report**

National Institute of Population Research and Training (NIPORT) Ministry of Health and Family Welfare Dhaka, Bangladesh

Associates for Community and Population Research (ACPR) Dhaka, Bangladesh

> ICF International Rockville, Maryland, USA

> > Funded by

Government of the People's Republic of Bangladesh U.S. Agency for International Development (USAID), Bangladesh

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This report presents final findings of the 2014 Bangladesh Health Facility Survey (2014 BHFS), which was implemented by the National Institute of Population Research and Training (NIPORT). ICF International provided technical assistance. Associates for Community and Population Research (ACPR), a private research agency, collected the data. The 2014 BHFS is part of the worldwide DHS Program, which assists countries in the collection of data to monitor and evaluate population, health, and nutrition programs. The survey was funded by the government of Bangladesh and United States Agency for International Development (USAID).

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



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## FOREWORD

The 2014 Bangladesh Health Facility Survey (BHFS) is the third nationally representative health facility survey designed to assess public, NGO, and private health care facilities in the formal sector of Bangladesh. The survey provides information on the availability of basic and essential health care services and the readiness of health facilities to provide quality client services. The services of interest in the 2014 BHFS included child health, maternal and newborn care, family planning, non-communicable diseases (NCDs), and service specific preparedness of health facilities based on WHO recommendations for quality services.

It is hoped that policy makers and program managers will focus on the shortcomings identified in the 2014 BHFS and assure that activities address all areas of concern in a concerted, coordinated manner. We urge all stakeholders to play active roles in closing the gaps in the provision of high-quality health services to the Bangladeshi population.

The need for further detailed analyses of BHFS data remains. I hope that academicians, researchers, and program personnel will conduct such analyses to provide additional in-depth knowledge for the future direction and effective implementation of the next sector program.

The successful completion of the 2014 BHFS was made possible by the contributions of many organizations and individuals. I would like to thank NIPORT, ACPR, and ICF International for their efforts. I deeply appreciate the Government of Bangladesh and the U.S. Agency for International Development (USAID) for the financial assistance that helped to ensure the ultimate success of this important national survey.

Syed Monjurul Islam

#### PREFACE



#### **Director General** National Institute of Population Research and Training Ministry of Health and Family Welfare

The 2014 Bangladesh Health Facility Survey (BHFS) is the third of its kind. The survey collected information from all seven administrative divisions on the preparedness of health facilities to provide high quality care that met the minimum requirement of WHO indicators for clients who sought services for family planning, maternal health, and child health, as well as tuberculosis and selected non-communicable diseases (NCDs). The survey presented results separately for the seven administrative divisions, all seven types of public facilities—district hospitals (DHs), maternal and child welfare centers (MCWCs), upazila health complexes (UHCs), upgraded union health and family welfare centers (upgraded UHFWCs), union health and family welfare centers (UHFWCs), union sub-centers/rural dispensaries (USCs/RDs), and community clinics (CCs)—as well as private hospitals with at least 20 beds and NGO static clinics and hospitals. The results are important for identifying areas of intervention that can improve the quality of family planning, maternal health, and child health services provided to clients. The survey is considered one of the primary data sources for monitoring performance on health system change.

The National Institute of Population Research and Training (NIPORT) and the Ministry of Health and Family Welfare implemented the survey with funding from the Government of Bangladesh (GOB) and the U.S. Agency for International Development (USAID). ICF International and USAID/Dhaka provided technical assistance and ACPR—a private research agency—collected the survey data.

Members of the Technical Review Committee (TRC)—which included experts from government, nongovernment, and international organizations as well as researchers and professionals who work in the health, nutrition, and population sectors—contributed their expert opinions during the survey implementation. A technical working group (TWG)—with representatives from NIPORT, MEASURE Evaluation, Save the Children, USAID/Bangladesh, ICF International, and ACPR—designed the survey questionnaires and implemented the survey. I offer my sincere appreciation to the TRC and TWG members for their efforts throughout the various stages of the survey.

The preliminary results of the 2014 BHFS, along with its key indicators, were released through a dissemination seminar in April 2015. This final report includes a more comprehensive analysis of the survey results with the key results, detailed findings, and a variety of interpretations. I hope this information will help policy makers and program managers as they monitor and design programs and design strategies for improving health and family planning services in the country. This report includes contributions from many professionals at NIPORT, ICF International, the International Centre for Diarrheal Disease Research, Bangladesh (icddr,b), MEASURE Evaluation, and Save the Children. I greatly appreciate all the individual authors who contributed to the BHFS 2014 Final Report.

I am deeply indebted to all the professionals of NIPORT's research unit for the successful completion of the survey. I also extend my thanks to ICF International, ACPR, and USAID/Bangladesh for completing the survey on time, and to all the 2014 BHFS field and office staff for their dedicated efforts that made these highly important data available in such a timely fashion.

Finally, I would like to take this opportunity to thank the GOB and USAID for their financial support for the 2014 BHFS.

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# ACRONYMS AND ABBREVIATIONS

ACE	angiotensin-converting enzyme
ACPR	Associates for Community and Population Research
AHI	assistant health inspector
AMTSL	active management of the third stage of labor
ANC	antenatal care
ANC	amenatar care
BCS	Bangladesh Civil Service
BDHS	Bangladesh Demographic and Health Survey
BEmONC	basic emergency obstetric and neonatal care
BHFS	Bangladesh Health Facility Survey
BMDC	Bangladesh Medical & Dental Council
BRAC	Bangladesh Rural Development Committee
CAPI	computer-assisted personal interview
CC	community clinic
CEmONC	comprehensive emergency obstetric and neonatal care
CHCP	
	community healthcare provider
CS	Civil Surgeon
CSF	cerebrospinal fluid
CT	computed tomography
CVD	cardiovascular disease
DALVE	dissbility adjusted life years
DALYS	disability-adjusted life years
DD-FP	Deputy Director-Family Planning
DDS	drug and dietary supply
DGDA	Directorate General of Drug Administration
DGFP	Directorate General of Family Planning
DGHS	Directorate General of Health Services
DH	district hospital
DHS	demographic and health survey
DM	diabetes mellitus
DNS	Directorate of Nursing Services
DOTS	Directly Observed Treatment, Short-course
EDCL	Essential Drugs Company Limited
EMO	emergency medical officer
EmOC	emergency obstetric care
EPI	expanded program on immunization
ESP	essential service package
FP	family planning
FPI	family planning inspector
FWA	family welfare assistant
FWC	family welfare center
FWV	family welfare visitor
Γ W V	family wentate visitor
GDP	gross domestic product
GOB	Government of Bangladesh
GP	general practitioner
НА	health assistants
HED	Health Engineering Department
HI	health inspector

HLD	high-level disinfection
HMIS	health management information system
HPNSDP	Health, Population, and Nutrition Sector Development Program
HTN	hypertension
ICDDR,B	International Centre for Diarrhoeal Disease Research
ICT	information and communications technology
IDF	International Diabetes Foundation
IFSS	Internet File Streaming System
IHD	ischemic heart disease
IHFAN	International Health Facility Assessment Network
IMCI	integrated management of child illness
IMPAC	integrated management of pregnancy and childbirth
IUCD	intrauterine contraceptive device method
LAPM	long-acting and permanent method
LGD	Local Government Division
LLP	local level planning
M&E	monitoring and evaluation
MBDC	Mycobacterial Disease Control
MCH-FP	maternal and child health/family planning
MCWC	maternal and child welfare center
MDG	Millennium Development Goal
MDR-TB	multiple-drug resistant TB
MIS	management information system
MNCH	maternal, neonatal, and child health
MNCS	maternal, newborn, and child survival
MNH	maternal and neonatal health
MOHFW	Ministry of Health and Family Welfare
MOLGRD C	Ministry of Local Government, Rural Development, and Cooperatives
NCD	non-communicable disease
NCHS	National Center for Health Statistics
NEMEW	National Electro-medical & Engineering Workshop
NGO	nongovernmental organization
NHSDP	NGO Health Service Delivery Program
NIPORT	National Institute of Population Research and Training
NSAPR	National Strategy for Accelerated Poverty Reduction
NTP	National Tuberculosis Control Program
OOP	out-of-pocket purchase
OP	operational plan
OPD	outpatient department
ORS	oral rehydration solution
PHC	primary health care
PIP	program implementation plan
PNC	postnatal care
PPP	public private partnership
QA	quality assurance
RCHCIB	Revitalization of Community-based Healthcare Initiatives in Bangladesh
RD	rural dispensary
RMO	residential medical officer

SACMO	sub-assistant community medical officer
SARA	Service Availability and Readiness Assessment
SBA	skilled birth attendant
SMF	state medical faculty
SPA	service provision assessment
SWAp	sector-wide approach
TB	tuberculosis
TEMO	Transport & Equipment Maintenance Organization
TRC	technical review committee
TRD	training, research, and development
TT	tetanus toxoid
TWC	technical working group
UFPO	Upazila Family Planning Officer
UH&FPO	Upazila Health & Family Planning Officer
UHC	upazila health complex
UHFWC	union health and family welfare center
UHS	Upazila Health System
UPHCSDP	Urban Primary Health Care Services Delivery Project
USAID	U.S. Agency for International Development
USC	union sub-center
USC/RD	union sub-center/rural dispensary
WHO	World Health Organization

### **KEY FINDINGS**

The 2014 Bangladesh Health Facility Survey (2014 BHFS) is the third survey of its kind in Bangladesh and follows the 2009 and 2011 BHFS surveys. It was designed to provide representative results for Bangladesh, for the different facility types and management authorities, and for each of the seven divisions of the country. Data was collected from 1,548 health facilities throughout Bangladesh. Information was gathered by sub-assistant community medical officers (SACMOs) working under supervision of medical doctors. They used facility inventory questionnaires and interviewed health care providers.

The assessment was designed to provide information on child health, maternal and newborn care, family planning (FP), selected non-communicable diseases, including diabetes and cardiovascular disease, and tuberculosis. It is a periodic assessment of health systems and quality of care provided by various health facilities. The information gathered can be used to assess the capacity of Bangladesh health facilities to provide good quality services and to identify the strengths and weaknesses of the health services infrastructure and systems of support.

The 2014 BHFS provides national-level information for the various types of facilities; this includes all types of registered public, non-governmental (NGO) clinics/hospitals, and private hospitals with at least 20 beds. The 2014 BHFS was conducted under the authority of the National Institute of Population Research and Training (NIPORT) of the Ministry of Health and Family Welfare (MOHFW), with funding from the Government of Bangladesh and the U.S. Agency for International Development (USAID). ICF International provided technical assistance under the USAID-funded DHS Program (formerly MEASURE DHS). Associates for Community and Population Research (ACPR), a private research agency, collected the data.

Key findings of the 2014 BHFS that follow are organized according to the topics of the chapters in this report.

#### FACILITY-LEVEL INFRASTRUCTURE, RESOURCES, MANAGEMENT, AND SUPPORT

- Nearly all health facilities in Bangladesh offer services on antenatal care (ANC) and outpatient curative care for sick children. The majority of the health facilities (above 80 percent) also provide modern family planning services. Normal delivery (18 percent) and tuberculosis (TB) diagnosis/treatment services (10 percent) are less commonly available. Caesarean delivery is the least available service (4 percent).
- Almost 80 percent of the all health facilities, excluding community clinics (CCs), are connected to the national electricity grid, and 45 percent of these facilities have regular electricity. One-fifth of CCs have an electrical connection with the national electric grid, while only 9 percent of CCs have regular electricity.
- One-third of facilities have computers with Internet access. On the day of the survey, more computers were functioning at district and upazila facilities (90 percent) than at CCs (42 percent) and union level facilities (24 percent).
- Basic diagnostic capacity in health facilities is low. Only one in ten facilities has provision for the hemoglobin test (most common); other tests are even less available in all facilities. Advanced diagnostic tests are also very uncommon (maximum 4 percent).
- About eight in ten facilities have syringes and needles and can safely dispose of sharps waste. Medical masks and guidelines for infection control and sterilization equipment were least often available in facilities.

- NGOs are most likely to have standard precaution items for infection control, followed by district and upazila level public facilities and private hospitals.
- Essential medicine in drug and dietary supply (DDS) kits such as amoxicillin tablets and syrup, paracetamol tablets and syrup, and cotrimoxazole is widely available (above 80 percent) in all facilities, while Vitamin A and iron tablets are the least available medicines (40 percent and 50 percent, respectively).
- Sixty-two percent of physician positions are filled at district and upazila facilities, whereas less than one-fourth of the sanctioned positions at union level facilities are currently filled.
- More than 80 percent of nurse positions in district and upazila public facilities and NGO facilities are filled; private facilities have more nurses than sanctioned positions.

#### **CHILD HEALTH SERVICES**

- Out-patient curative care for sick children is widely available in Bangladesh health facilities (93 percent of facilities).
- Less than 80 percent of facilities offer vaccination services, and only 62 percent provide growth monitoring, an essential service in Bangladesh where one third of children under 5 are stunted and underweight.
- Seven in ten facilities provide Vitamin A supplementation to children.
- Only about half of facilities that offer child curative care have at least one staff member who had ever received training on integrated management of child illness (IMCI).
- Only half of facilities that offer child curative care had IMCI guidelines, and less than one-third had growth monitoring guidelines.
- Only four in ten facilities that offer child curative care have all four basic types of primary care equipment such as scales, measuring boards, thermometers, and stethoscopes.
- Among facilities that offer child curative care, more than eight in ten have oral rehydration solution, the first-line antibiotic amoxicillin, and drugs for treating intestinal parasites. Other essential drugs such as zinc and cotrimoxazole are less widely available.
- Only one in ten facilities that offer child curative care has hemoglobin diagnostic capacity.
- Nine in ten providers of child health services received recent supervision, and one-third received recent in-service training (during the last 24 months).
- Less than 10 percent of facilities that offer child curative care have all WHO-recommended readiness indicators<sup>1</sup> to treat sick children.

#### FAMILY PLANNING SERVICES

• Eight in ten health facilities in Bangladesh provide, prescribe, or counsel clients about at least one modern family planning (FP) method.

<sup>&</sup>lt;sup>1</sup> Trained staff (at least one provider with in-service training at any time on at least some components of IMCI), IMCI guidelines, equipment (child scale, thermometer, growth chart), and medicines (ORS, zinc dispersible tablets/syrup, amoxicillin syrup/suspension, paracetamol syrup/suspension, and mebendazole/albendazole)

- Private hospitals are less likely to offer modern FP methods (21 percent), long-acting and permanent family planning methods (LAPMs) (19 percent), and male or female sterilization services (14 percent) than other health facilities.
- Three-quarters of facilities in Bangladesh provide at least two temporary modern FP methods, and one-quarter of facilities provide at least four temporary modern FP family methods.
- More than one-fourth (28 percent) of facilities in Bangladesh provide at least one type of LAPM to clients.
- Male or female sterilization services are provided in 5 percent of all facilities; urban facilities (30 percent) are more likely to provide male or female sterilization services than rural facilities (2 percent).
- The most commonly provided temporary modern FP methods in Bangladesh health facilities are male condoms (76 percent), combined or progestin-only oral pill (72 percent), and combined or progestin-only injectable (68 percent).
- More than one-fourth (27 percent) of all facilities provide the intrauterine contraceptive device (IUCD) method; fewer facilities provide implants (7 percent), tubal ligation (4 percent), and vasectomy (4 percent).
- FP services are less likely to be available at district hospitals, union sub-centers/rural dispensaries (USC/RDs), and private hospitals than at other health facilities.
- Nationwide, 87 percent of facilities that report providing FP methods had every method that they provide available on the day of the assessment visit.
- Over half of facilities (54 percent) that offer FP services have FP guidelines available at the service site.
- Excluding CCs, the majority of the facilities that offer FP services had an examination bed or couch (83 percent) and a light (61 percent).
- Nearly three in ten FP providers received recent in-service training and supervision.
- Only one in four of facilities that offer FP services has readiness to provide FP services, i.e., the facility is equipped with FP guidelines, at least one trained staff person, a blood pressure apparatus, and three modern contraceptive methods (oral pill, injectables, or condoms).

#### **ANTENATAL CARE SERVICES**

- More than 97 percent of health facilities in Bangladesh offer ANC services.
- Among facilities that offer ANC services, only 16 percent offer tetanus toxoid vaccine when ANC services are offered.
- Half of facilities that offer ANC services had at least one staff member who had ever received in-service training related to ANC, and half had ANC guidelines on the day of assessment.
- Among facilities that offer ANC services, 12 percent can test for hemoglobin, 19 percent for urine protein, and 18 percent for urine glucose.
- Fifty-five percent of facilities that offer ANC services had hand-washing supplies for infection prevention available at the service site on the day of the assessment.

- Twenty-two percent of interviewed ANC providers had received in-service training related to ANC during the 24 months preceding the survey, and nine in ten had received personal supervision in the 6 months preceding the survey.
- Only four percent of facilities are ready to provide quality ANC services according to WHO criteria.<sup>2</sup>

#### **DELIVERY AND NEWBORN CARE**

- Only 18 percent of all facilities (39 percent excluding CCs) offer normal delivery services.
- Almost all district hospitals (DHs) and upazila health complexes (UHCs), most private hospitals and maternal and child welfare centers (MCWCs), about half of upgraded union and family welfare centers (UHFWCs), 28 percent of union level public facilities, and 7 percent of CCs offer normal delivery services.
- Excluding CCs, only 12 percent of health facilities offer caesarean delivery services; these are primarily district and private hospitals, 55 percent of MCWCs, and 20 percent of UHCs.
- Among facilities that offer normal delivery services, the availability of guidelines related to delivery services is generally low (27 percent); DHs (41 percent), MCWCs (39 percent), and UHCs (41 percent) are slightly more likely to have the guidelines than other facility types.
- About six in ten facilities that offer normal delivery had a delivery pack with all necessary equipment, such as cord clamps, scissors, and suture materials with a needle, on the day of the survey.
- Fifty-four percent (57 excluding CCs) of facilities that provide delivery services have at least one staff member who has ever received in-service training on routine care for labor and delivery; fewer facilities have at least one staff member ever trained in neonatal resuscitation, active management of the third stage of labor (AMTSL), and integrated management of pregnancy and child birth (IMPAC).
- Essential medicines such as injectable uterotonics, diazepam, antibiotics, and intravenous fluids with an infusion set were available in only 28-36 percent of facilities, most often in district and private hospitals.
- One-fourth of facilities that offer normal delivery services have all six essential items<sup>3</sup> for infection control.
- Excluding CCs, only 17 percent of facilities that provide delivery services can be considered Basic Emergency Obstetric and Neonatal Care (BEmONC) facilities, i.e., the facilities offer normal delivery care and have performed all seven signal functions (treatments)<sup>4</sup> for emergency obstetric care in the three months prior to the survey. Only 6 percent of the facilities have performed all nine signal functions<sup>5</sup> for emergency obstetric care and can be considered Comprehensive Emergency Obstetric and Neonatal Care (CEmONC) facilities.

<sup>&</sup>lt;sup>2</sup> Trained staff (at least one provider of ANC with in-service training at any time on ANC), guidelines (national or other ANC guidelines at the facility), equipment (blood pressure apparatus), diagnostic capacity (hemoglobin test, urine protein test), and medicines (iron or folic acid tablets).

<sup>&</sup>lt;sup>3</sup> Soap, running water, alcohol-based hand disinfectant, latex gloves, sharps container, and waste receptacle

<sup>&</sup>lt;sup>4</sup> Antibiotics, oxytocin, anticonvulsant, assisted vaginal delivery, manual removal of placenta, removal of retained product of conception, and neonatal resuscitation

<sup>&</sup>lt;sup>5</sup> Antibiotics, oxytocin, anticonvulsant, assisted vaginal delivery, manual removal of placenta, removal of retained product of conception, neonatal resuscitation, blood transfusion, and caesarean delivery

• Most facilities that provide delivery services (including all private hospitals) do not have the required equipment, medicines, and trained staff ready to provide quality services according to WHO criteria.<sup>6</sup>

#### **NON-COMMUNICABLE DISEASES**

- Overall, 18 percent (26 percent excluding CCs) of Bangladesh health facilities offer services for diabetes, and 16 percent (28 percent excluding CCs) provide diagnosis, prescribe treatment, or manage patients with cardiovascular diseases.
- District hospitals (95 percent) and UHCs (81 percent) are more likely to provide services for diabetes and cardiovascular diseases when compared to the other facilities.
- Nearly a quarter of all facilities have guidelines for the diagnosis and management of diabetes and cardiovascular diseases.
- Eighty percent or more of health facilities do not have at least one staff member recently trained to provide services for either diabetes or cardiovascular diseases.
- Most facilities are not prepared to provide quality services for diabetes or cardiovascular disease. In particular, facilities lack the essential medicines for treating either cardiovascular disease or diabetes.

#### TUBERCULOSIS

- Nine percent of all facilities offer any TB diagnostic services, and only 5 percent of all facilities provide any TB treatment and/or TB treatment follow-up services.
- TB services are provided primarily at DHs (94 percent), UHCs (93 percent), and private hospitals (62 percent).
- Among facilities that offer TB services, 43 percent have TB guidelines available.
- Only 13 percent of facilities that offer TB services have TB rapid diagnostic test kits, and only 5 percent have culture medium for diagnosing TB.
- One-third of facilities that offer TB services have first-line medicines for treating TB. Less than half of the facilities have at least one provider who ever received in-service training related to TB.
- Based on WHO criteria,<sup>7</sup> only 26 percent of DHs, 21 percent of UHCs, and 15 percent of NGOs that offer any TB services are considered ready to provide TB services. No private hospitals were considered ready.

<sup>&</sup>lt;sup>6</sup> Ever trained staff in IMPAC, guidelines on BEmOC or CEmOC, equipment (examination light, delivery pack, suction apparatus, neonatal bag and mask, partograph, gloves), and medicines and commodities (injectable oxytocin, injectable antibiotic, magnesium sulphate, skin disinfectant, and intravenous solution with infusion set)

<sup>&</sup>lt;sup>7</sup> Trained staff (at least one provider with in-service training at any time on TB), guidelines (any guideline for TB), diagnostic capacity, TB microscopy, and medicines (first-line TB medicines)

# BANGLADESH





#### 1.1 HEALTH STATUS IN BANGLADESH

review of the health in Bangladesh shows that the health status of the country's population has improved substantially over the past decade. Life expectancy at birth increased by 6 years from 2000-2012 (BBS 2014). This was due to the steady decline in childhood and maternal mortality. Between 1999-2003 and 2010-2014, under-5 mortality declined from 88 to 46 deaths per 1,000 live births (NIPORT et al. 2015). Maternal mortality also declined by 47 percent from 322 to 170 deaths per 100,000 live births between 2001 and 2013 (WHO 2014). As a result, Bangladesh has achieved its Millennium Development Goal (MDG) 4 target for under-5 mortality (48 deaths per 1,000 live births) and is expected to achieve its MDG 5 target for maternal mortality (143 deaths per 100,000 live births) by 2015. Evidence suggests that changes in fertility behavior have been one of the major contributors to the steady decrease in mortality. Between 2000 and 2011, the total fertility rate in Bangladesh declined by a child from 3.3 in 1999-2000 to 2.3 in 2011 (NIPORT et al. 2013). Streatfield et al. 2012 estimate that 25 percent of the decrease in maternal mortality during the period was due to the decline in the fertility rate.





Bangladesh has also sustained a surprisingly rapid reduction in the rate of child undernutrition in last two decades. The 2014 Bangladesh Demographic and Health Survey (BDHS) showed that Bangladesh had achieved MDG 1 target for underweight among under-5 children (33 percent) according to the National Center for Health Statistics (NCHS) reference. Bangladesh is only 2 percentage points short of reaching the MDG 1 target for underweight with the WHO reference (NIPORT et al. 2015). Rapid wealth accumulation and large gains in parental education are the two largest drivers of such accomplishment, although health, sanitation, and demographic factors have played significant secondary roles (Headey et al. 2014).

Despite these achievements, Bangladesh continues to carry a high burden of disease that includes non-communicable diseases (NCDs), tuberculosis, respiratory infections, and neuropsychiatric conditions. As a country, Bangladesh is committed to addressing these health problems.

#### 1.2 HEALTH, POPULATION, AND NUTRITION (HPN) SECTOR PROGRAM

With the provision in the national constitution as an umbrella and guiding principles such as Vision 2021, the MDGs, and the National Strategy for Accelerated Poverty Reduction (NSAPR II) as driving forces, the Ministry of Health and Family Welfare (MOHFW) designed the 2011-2016 Strategic Plan for the Health, Population, and Nutrition Sector Development Program (HPNSDP). The HPNSDP seeks to ensure quality and equitable health care for all citizens by improving access to and utilization of health, population, and nutrition services (MOHFW 2011). The HPNSDP initiated the third sector-wide approach (SWAp) in the HPN sector and outlined the government policy intentions to improve both access to and utilization of HPN services, particularly by the poor.

The vision of the HPNSDP is to ensure that the people are healthier, happier, and economically productive and to make Bangladesh a middle-income country by 2021. The mission is to create conditions that give the people of Bangladesh the opportunity to reach and maintain the highest attainable level of health.

The HPNSDP Program Implementation Plan (PIP) describes the following sector-specific strategic priorities and interventions along with their implementation mechanisms:

- Streamline and expand the access and quality of maternal, neonatal, and child health (MNCH) services and in particular, supervised deliveries (MDG 4 and MDG 5).
- Revitalize various family planning (FP) interventions in order to attain replacement level fertility (MDG 5).
- Improve and strengthen nutritional services by mainstreaming nutrition within the regular Directorate General of Health Services (DGHS) and the Directorate General of Family Planning (DGFP) services (MDG 1).
- Strengthen preventive approaches as well as control programs for communicable diseases (MDG 6).
- Expand NCD control efforts at all levels by streamlining referral systems.
- Strengthen hospital accreditation and management systems.
- Strengthen support systems by increasing the health workforce at upazila and community clinic (CC) levels, including capacity building and an enhanced focus on coordinating the implementation of operational plans (OPs), a management information system (MIS) that includes information and communications technology (ICT) and monitoring and evaluation (M&E) functions.
- Strengthen drug management and improve quality drug provision and procurement processing to reduce the time between procurement and distribution.
- Increase coverage and quality of services by strengthening coordination with other intra- and inter-sectoral and private sector service providers.
- Pursue priority institutional and policy reforms, such as decentralization and local level planning (LLP), incentives for service providers in hard to reach areas, public private partnerships (PPPs), and a single annual work plan.

The HPNSDP emphasizes specific service components that address maternal health, neonatal health, and nutrition. Notable examples include emphasizing MNCH interventions and services in the urban slums, increasing the number of skilled birth attendants (SBAs), gradually increasing facility based 24 hour/7 day services for the appropriate management of maternal complications, and prioritizing areas of high maternal mortality, both geographically and among socially disadvantaged populations. The strategy also stresses introducing women-friendly services at the CCs and domiciliary level and by nongovernmental

organizations (NGO); sharing of expertise and facilities for maternal and neonatal health (MNH) services between the DGHS and DGFP; and strengthening newborn services with a home visit by a trained worker within two days of a child's birth and rapid, effective referral systems for sick newborns.

Strong investments in FP have led to a continuous reduction in the annual population growth rate and total fertility rate in Bangladesh. The HPNSDP strategy emphasizes the diversified, countrywide, mass scale FP service delivery that has been effectively promoting long-acting and permanent methods (LAPMs) and addressing the unmet need for family planning services.

Nutrition is also a priority area in the HPN sector program. Nutrition is mainstreamed through the integration of nutrition services in all facilities that provide maternal, neonatal, and child health (MNCH) services under the DGHS, DGFP, and the CCs. The strengthening of nutrition services has involved scaling up of nutrition activities throughout the country, with particular priority given to remote and poorer areas, and collaborating with the Ministry of Local Government, Rural Development, and Cooperatives (MOLGRDC) in the urban areas.

Key elements of the HPNSDP that are related to primary health care (PHC) include the CC-led expansion of PHC services, piloting the Upazila Health System (UHS), and making the union health and family welfare centers (UHFWCs) and union sub-centers fully functional. To facilitate reaching the MDG 5 and reducing newborn deaths, every union facility has been strengthened to ensure they have the capacity and readiness for normal deliveries and for referring complicated cases. The CCs are the first contact point and entry to the health system. The provision of essential service package (ESP) delivery in the CCs has been strengthened.

The HPNSDP emphasizes the improvement of hospital services through the introduction of clinical protocols, establishment of effective hospital waste management systems, and provision of safe blood in public and private hospitals. Other strategic priorities include equipping hospitals with modern materials and diagnostic facilities, making the hospitals women-friendly, improving emergency obstetric care (EmOC) services, establishing hospital accreditation, licensing and supervision of total quality management, initiating referral systems at secondary and tertiary hospitals, and introducing performance based systems for all service providers.

For improving service provision in urban areas, an urban health strategy and health development plan has been prepared in collaboration with the MOLGRDC. Urban dispensaries have been expanded for providing PHC services, and there is a referral system between urban dispensaries and the second and third level hospitals. The feasibility of introducing a General Practitioner (GP) system is being explored.

The HPNSDP gives priority to addressing the needs of difficult-to-reach populations. This involves motivating and counseling service providers to provide adequate care to the marginalized and socially excluded population and strengthening collaboration with other ministries, NGOs, and the private sector.

The strategy also emphasizes strengthening the health systems by addressing issues such as stewardship and governance, the legal and regulatory framework, the mainstreaming of gender equity, and the effective use of the NGO and PPPs. Other priority areas for strengthening health systems are planning and budgeting, monitoring and evaluation (M&E), health sector financing, health information systems, research and development, pre-service education and in-service training, regulation of drug administration and quality drug management, procurement and supply chain management, maintenance of physical facilities, and inter-sectoral coordination.

#### 1.3 HEALTH SERVICE DELIVERY SYSTEM OF BANGLADESH

The health service delivery system of Bangladesh is an intricate web of public health departments, NGOs, and private institutions. Responsibilities and functions range from policy planning, regulation, implementation, and health care delivery to medical education. The MOHFW is responsible for formulating

national-level policy, planning, and decision-making for the provision of healthcare and education. The national-level policies, plans, and decisions are translated into actions by the various implementing authorities across the country from the national to the community level.

The DGHS, the DGFP, the Directorate of Nursing Services (DNS), and the Revitalization of Community-based Healthcare Initiatives in Bangladesh Project (Community Clinics Project) (RCHCIB) are engaged in delivering HPN services through various operational plans (OPs) under HPNSDP. The Directorate General of Drug Administration (DGDA), the Directorate General of Health Engineering Department (formerly known as Construction Management & Maintenance Unit or CMMU) (HED), the Essential Drugs Company Limited (EDCL), the Transport & Equipment Maintenance Organization (TEMO), and the National Electro-medical & Engineering Workshop (NEMEW) are responsible for ensuring logistic and supplies for providing HNP services.

The MOHFW and its relevant regulatory bodies (Bangladesh Medical & Dental Council (BMDC); State Medical Faculty (SMF); Homeo, Unani and Ayurvedic Board; and Bangladesh Pharmacy Council) have indirect control over the system of public, NGOs, and private sector healthcare providers. In addition, the delivery of health services in urban areas, including primary health care services, is mandated to the Ministry of Local Government, Rural Development and Cooperatives (MOLGRDC).

#### 1.3.1 Management Structure and Health Facilities under DGHS

With more than one hundred thousand officers and staff members, the DGHS is the largest implementing authority under the MOHFW. In addition to the operation of healthcare delivery systems throughout the country, the DGHS provides technical assistance to the Ministry for new programs and interventions and for improvements in existing ones. The health care delivery system under DGHS extends from the national through the community level. The activities are implemented under regular revenue setups and development programs.

The healthcare infrastructure under the DGHS includes six tiers: national, divisional, district, upazila (sub-district), union, and ward. At the national level, there are institutions both for public health functions as well as for postgraduate medical education/training and specialized treatment to patients.

In each division, a Divisional Director for Health governs activities, with assistance from deputy directors and assistant directors. There is one infectious disease hospital and one or more medical college(s) at the divisional headquarters. Each medical college includes a hospital. Some divisional headquarters also have general hospitals and institutes of health technologies. Divisional institutes provide tertiary level care.

The Civil Surgeon (CS) is the district health manager who is responsible for delivering secondary and primary care services. In each district, there is a district hospital. Some district hospitals are managed by superintendents while others are headed by civil surgeons. Some of the district headquarters have medical colleges with attached hospitals, medical assistant training schools, and nursing training institutes.

The Upazila Health & Family Planning Officer (UH&FPO) is the health manager at the upazila level. The UH&FPO manages all public health programs, including primary healthcare services in the upazila and the upazila hospital, which has 30 to 50 beds. Most upazilas have hospitals, except where the district headquarters are located; in those upazilas, the district hospital provides hospital services.

At the union level, there are three types of health facilities: rural dispensaries (RDs), union subcenters (USCs), and UHFWCs. In addition to other lower level staff, each union health facility employs a medical doctor and has sub-assistant community medical officers (SACMOs) who provide health services. Only outpatient services are available at union level facilities.

The MOHFW also has established community clinics (CCs) at the ward level; each CC serves an average of 6,000 people. There are currently 12,815 CCs in operation. The RCHCIB project is responsible

for operationalizing the CCs. The CCs provide the basic healthcare package to the people in the community, i.e., maternal and child healthcare, reproductive health and FP services, immunization, nutrition education, micronutrient supplementation, health education and counseling, communicable disease control, treatment for minor ailments and first aid, and referral to higher-level health centers. Some CCs also have a community SBA and offer services for normal delivery. The CCs are managed by a 15 to 17 member management committee that is selected from the communities served by the CC. Local government representatives are included in the management committee, and at least 4 members must be female. There are also 3 community support groups with each including 15-17 members who work as unpaid community health volunteers who assist the management committee and community clinic.

The Ministry has recruited and trained 13,240 full-time community healthcare providers (CHCPs) to operate the CCs and provide quality health care. The CHCPs have laptop computers and Internet connections to update local health data in an online database that is used for evidence-based decision-making and planning. In addition to the CHCP, the existing domiciliary staff members of the DGHS and DGFP provide service to the CCs, with the DGHS staff available 3 days per week and the DGFP staff available the other 3 days per week. At the ward or village level, there are also domiciliary health workers, with one for every 5,000 to 6,000 people in a ward or village. In total, there are 26,482 sanctioned posts of domiciliary workers under DGHS: 20,881 health assistants (HA), 4,202 assistant health inspectors (AHIs), and 1,399 health inspectors (HIs).

Level	Type of facility	Type of service	No. of facilities
	District hospital	Hospital	53
District	General hospital	Hospital	11
		Total of district-level hospitals	64
	Mother and child welfare center	Hospital	62
	Upazila health complex (50-bed)	Hospital	268
	Upazila health complex (31-bed)	Hospital	146
	Upazila health complex (10-bed)	Hospital	11
Jpazila		Total of upazila health complexes	425
	Hospitals outside health complexes		
	31-bed hospital	Hospital	5
	30-bed hospital	Hospital	1
	Mother and child welfare center	Hospital	12
	Union-level facilities under DGHS		
	20-bed hospital	Hospital	18
	10-bed hospital	Hospital	13
	Union sub-center	Outpatient only	1,275
Jnion	Union health and family welfare center	Outpatient only	87
	Union-level facilities under DGFP		
	Mother and child welfare center	Hospital	23
	Union health and family welfare	11	
	Center – Upgraded	Hospital	0.007
	Union health and family welfare center	Outpatient only	3,827
Nard	Community clinic	Outpatient only	12,815*

#### 1.3.2 Management Structure and Health Facilities under DGFP

The DGFP implements an MCH-based FP program with an extensive network of health facilities, satellite clinics, and domiciliary workers. The DGFP services outlets throughout the country. More than fifty thousand officials, service providers, and field workers work under the DGFP, whose Maternal and Child Health/Family Planning (MCH-FP) service delivery system extends from the district to the community level.

In each district, there is a MCH-FP clinic at the District Sadar Hospital and a separate Mother and Child Welfare Center (MCWC) that deliver MCH-FP services. A medical officer (clinic), family welfare visitors (FWVs), and dai (nurses) provide antenatal care (ANC), normal delivery, postnatal care (PNC), and child health care including an expanded program on immunization (EPI) and all contraceptives including

sterilization in MCWCs. The FWVs at the MCH-FP clinics in the District Sadar Hospital provide ANC, normal delivery (limited facilities for "at-risk" cases), PNC, all contraceptives including sterilization, and follow-up services. Similar services are also available in model clinics attached to the public medical college hospitals. The Deputy Director-Family Planning (DD-FP) is the manager responsible for overall management of MCH-FP program at the district level, while the Divisional Director (Family Planning) is the program head at the divisional level.

The MCWCs provide services at the upazila level and below that are similar to those offered at the district level and have an equivalent staffing profile. Almost all upazila health complexes (UHCs) have MCH-FP units that provide ANC, normal delivery, PNC, child health care including EPI and health education, and all contraceptives including sterilization. The UHC MCH-FP units are led by a medical officer (MCH-FP) along with the FWVs. The Upazila Family Planning Officer (UFPO) is the manager responsible for overall management of the FP program at the upazila level, while the medical officer (MCH-FP) is the upazila manager for MCH service delivery.

Almost all union level facilities can provide MCH-FP services. There are 3,827 union health and family welfare centers (UHFWCs) under the DGFP. The SACMO and FWVs provide ANC (with an emphasis on screening for "at-risk" pregnancies and referral), normal delivery at upgraded facilities, PNC, child health care including health education, and contraceptives that include clinical methods, and treatment of general patients. The FWVs are also assigned in some union sub-centers (USCs) and RDs under the DGHS to deliver MCH-FP services. The FWVs and SACMOs are responsible for delivering MCH-FP services and health education at more than 30,000 satellite clinics that are organized monthly at the community level by FP fieldworkers.

The DGFP maintains a unique network of community-based fieldworkers for domiciliary FP services. There are about 23,500 family welfare assistants (FWAs) who work throughout the country at the household level to distribute contraceptives and provide motivation, counseling, health education, and referrals for MCH-FP services. The FWAs also provide services at CCs and EPI outreach sites. The family planning inspector (FPI) is the union level supervisor who works under DGFP and supervises the FWAs' activities.

#### 1.3.3 Urban Primary Health Care Services Delivery Project (UPHCSDP)

The Local Government Division (LDG) of the Government of Bangladesh (GOB) is mandated to provide primary health care services to the urban residents. Since 1998, the LGD has implemented the Urban Primary Health Care Services Delivery Project (UPHCSDP) through a partnership among urban local government bodies and NGOs. The project's goal is to improve the health status of the urban population, especially the poor, through improved access to and utilization of efficient, effective, and sustainable primary health care services. The UPHCSDP delivers an expanded service delivery package through more than 150 health care centers; 25 of the centers provide in-patient facilities that provide coverage for all city corporations and the four district municipalities of the country. The UPHCSDP services include MCH care, reproductive health and FP, nutrition, communicable and NCD control, limited curative care, and diagnostic services. The project is a unique model of a public-private partnership that provides primary health care to the urban poor, especially mothers and children.

#### 1.3.4 NGO Health Programs

The GOB encourages the involvement of NGOs in delivering services that address the country's health challenges. More than 4,000 NGOs, including international organizations (i.e., CARE, Save the Children and World Vision), large national NGOs (Bangladesh Rural Development Committee (BRAC), Concerned Women for Family Planning, and the Grameen Kalyan Health Program), and hundreds of small, local NGOs are active in the health sector in Bangladesh. The NGOs provide essential primary health care services through a nationwide network of static clinics, satellite clinics, and community service providers. The NGO Health Service Delivery Program (NHSDP), a USAID funded network of about 25 NGOs, deliver

a broad package of MCH and FP services through more than 300 static clinics and about 8,800 satellite clinics that serve about 20 million people in Bangladesh. Similarly, BRAC has a large community-based network for delivering primary health care services that include essential health care; Maternal, Newborn, and Child Survival (MNCS); communicable and NCD control; nutrition; and other services. The BRAC health program has an estimated 55,000 CHWs who provide preventive care and simple curative care services to women and children in rural areas and urban slums.

#### 1.3.5 Private Health Sector

The private health sector in Bangladesh includes large and small commercial companies, professionals (i.e., doctors and individual providers), and informal providers. The private sector includes health services provided at hospitals, nursing and maternity homes; clinics operated by doctors, nurses, midwives, and paramedical workers; diagnostic facilities (i.e., laboratories and radiology units); and the sale of drugs from pharmacies, as well as unqualified static and itinerant drug sellers. As of 2013, the DGHS has registered 8,203 private hospitals, clinics, and diagnostic centers in Bangladesh. There are 2,983 registered private hospitals and clinics is 45,485 (MIS 2014). Local pharmaceutical companies manufacture and distribute most of the targeted products; the majority of Bangladeshis usually obtain their drugs from the private sector. Even among the rural residents and the urban poor, the most common source of drugs is from direct out-of-pocket (OOP) purchase from private sources.

#### 1.4 HEALTH FINANCING

In Bangladesh, 3.5 percent of the gross domestic product (GDP) is spent on health, of which the public sector contribution is less than one-third. In term of dollars, the total health expenditure in the country is US\$ 27 per capita per annum, with an annual growth rate of about 8 percent (MOHFW 2015).

Historically, supply-side financing of health care services in Bangladesh has been the central strategy for improving the access of poor households to essential health care services. The bulk of health care financing comes from OOP expenditures, which suggests that people are willing to pay for better care. Sixty-three percent of the total expenditure on health is privately financed through OOP purchases, 23 percent is financed by the GOB from tax revenues and development outlays, 8 percent with international development assistance, and 2 percent is provided by NGOs (MOHFW 2015). A negative consequence of the large share of OOP purchases is the burden it places on the population in the lowest quintile who has the least ability to pay for health care.

Expenditure for curative care was 26 percent of total health expenditure in 2012, which is equivalent to \$1.4 billion. This figure has grown very quickly in recent years, and has almost doubled in four years. Almost half of the expenditures for curative care is incurred for inpatient curative care, delivered primarily in private health facilities (MOHFW 2015).

Community financing mechanisms and risk-pooling systems are nearly non-existent except in small pockets of NGO innovation, which have a health insurance component within their package of microcredit programs. Voluntary health insurance schemes include spending that provides or reimburses medical care for employees of business entities; this is 5 percent of the total expenditure on health.

To increase the financial protection for the entire population and decrease OOP payments at the point of service, the MOHFW has three strategic objectives under the Health Care Financing Strategy 2012-2032 (HEU 2012).

- Generate more resources for effective health services.
- Improve equity and increase health care access, especially for the poor and vulnerable.
- Enhance efficiency in resource allocation and utilization.

The goal of the Health Care Financing Strategy is to attain universal coverage by 2032 by extending financial risk protection and ensuring access to quality service. In response to the heavy reliance on OOP purchases—which are inequitable and inefficient and have the most impact on the poor—the strategy set a target to cut OOP expenditures for health in half at the point of service from the current level of 64 percent of total health expenditures to 32 percent by 2032.

The strategy provides a framework for developing and advancing health financing in Bangladesh. The framework aims to increase the level of funding for health, ensure an equitable distribution of the health financing burden, improve access to essential health services, reduce the incidence of impoverishment caused by catastrophic health care expenditures, and improve the quality and efficiency of service delivery.

#### 1.5 HEALTH STEWARDSHIP

The government is taking steps to improve its leadership and regulatory role to increase both equity and quality of health services, especially for the poor and the disadvantaged. The Health Care Financing Strategy includes the development of a new health policy; the revitalization of primary health care by ensuring that CCs have the required human resources, supplies, and logistics to function effectively; the recruitment and appropriate deployment of additional human resources for health; and the gradual extension of e-health services to the rural areas.

In spite of recent improvements, further steps are needed immediately to make health services responsive to the needs and demands of the population. The governance of the system is still considered weak in providing equitable services. Regulatory mechanisms, especially within the for-profit private sector, must be strengthened as soon as possible. Given the availability of a functional local government system, further decentralization of authority and responsibility with proper accountability at all levels must be institutionalized.
# METHODOLOGY

# 2.1 OVERVIEW

B angladesh has an extensive network of public, private, and nongovernmental organization (NGO) facilities for providing basic health services. The Government of Bangladesh (GOB) is committed to strengthening health systems and improving the quality of care. In the past 15 years, investments in health facilities have expanded services and improved access to quality care. Subsequently, Bangladesh has achieved immense success in increasing health service coverage and utilization. Although service utilization is assessed and monitored intensively with various data sources, the improvements in health systems and quality of care have not been monitored systematically. Under the Health, Population and Nutrition Sector Development Program (HPNSDP) 2011-2016, the Ministry of Health and Family Welfare (MOHFW) is committed to periodic assessment of health systems and quality of care provided by various health facilities. As part of this assessment effort, the National Institute of Population Research and Training (NIPORT) was entrusted with conducting the 2014 Bangladesh Health Facility Survey (BHFS) under the training, research and development (TRD) operational plan of the HPNSDP.

The 2014 BHFS is an assessment of health care facilities in the formal sector of Bangladesh. The survey provides information on the availability of basic and essential health care services<sup>1</sup> and the readiness of health facilities to provide quality services to clients. The 2014 BHFS is the third survey of its kind and follows the 2009 and 2011 BHFS. Like the two previous surveys, the 2014 BHFS collected information from all types of health facilities managed by the government, NGO clinics and hospitals, and private for-profit hospitals in all 64 districts of the country. Unlike the earlier surveys, the 2014 BHFS used standardized questionnaires from the service provision assessment (SPA) component of USAID's Demographic and Health Surveys (DHS) Program to collect information on the availability of services and the preparation of facilities to provide quality, effective, and efficient services to clients. The 2014 BHFS focused primarily on the service readiness indicators that were jointly developed and proposed by World Health Organization (WHO), the U.S. Agency for International Development (USAID), the World Bank, the International Health Facility Assessment Network (IHFAN), and other stakeholders (WHO 2012). The 2014 data are not strictly comparable to the 2009 and 2011 survey results because the 2014 BHFS used a different set of questionnaires and defined indicators slightly differently.

The 2014 BHFS provides information on child health, maternal and newborn care, family planning (FP), and services for selected non-communicable diseases (NCDs) (diabetes, cardiovascular diseases), and tuberculosis. For each of these services, the 2014 BHFS assessed whether components considered essential for quality service delivery were present and functioning. In general, the components that were assessed are those that are commonly considered important to various programs supported by the government and development partners. In some cases, however, the 2014 BHFS also assessed whether more sophisticated components were present, such as higher-level diagnostic and treatment modalities or support systems for health services that are usually introduced after basic-level services have been put in place.

# 2.2 INSTITUTIONAL FRAMEWORK AND OBJECTIVES OF THE 2014 BHFS

# 2.2.1 Institutional Framework

The 2014 BHFS was conducted under the authority of NIPORT of the MOHFW, GOB. The ICF International provided technical assistance under the USAID-funded DHS Program (formerly MEASURE DHS). Associates for Community and Population Research (ACPR), a private research agency, collected the

<sup>&</sup>lt;sup>1</sup> Basic and essential health care services of interest in the 2014 BHFS included child health, family planning, maternal and newborn care, non-communicable diseases and tuberculosis.

data. Financial support for the survey was provided by the GOB and USAID. A Technical Review Committee (TRC) and a Technical Working Group (TWG) oversaw all policy and technical issues related to the survey.

## 2.2.2 Objectives of the 2014 BHFS

The main objectives of the 2014 BHFS were to:

- Assess the availability of health services, including maternal and child health and FP services.
- Ascertain general preparedness of the health facilities and availability of basic amenities, equipment, laboratory services, essential medicines, standard precautions for infection control, and human resources at the health facilities.
- Assess service-specific readiness of health facilities to provide maternal and child health, FP, and treatment of diabetes, cardiovascular disease, and tuberculosis, measured in terms of the WHO recommended minimum conditions required to provide quality services.
- Compare findings among facility types and managing authorities.

## 2.3 DATA COLLECTION METHODS

The 2014 BHFS used two types of data collection tools:

- Facility Inventory questionnaire.
- Health Care Provider Interview questionnaire.

Both the *Facility Inventory* and *Health Care Provider Interview* questionnaires were loaded onto tablet computers and administered as computer-assisted personal interviews (CAPIs).

The *Facility Inventory* questionnaire obtained information on the availability and preparedness of the facilities to provide each priority service. The questionnaire collected information on the availability of specific items (including their location and functional status), components of support systems (e.g., logistics, maintenance, and management), and facility infrastructure, including the service delivery environment. The data collectors interviewed the person most knowledgeable about the facility's organization and/or the most knowledgeable provider of each service. If another person or provider needed to provide some specific information, the data collectors consulted that person or provider to obtain the information. However, the data collectors considered only observed items as available in the facility.

The Facility Inventory questionnaire was organized into three modules:

- Module 1 collected information on service availability and included two sections.
- **Module 2** collected information on general facility readiness. This module included seven sections that covered topics such as facility infrastructure (i.e., sources of water and electricity), staffing, health management information systems, health statistics, processing of instruments for re-use, health care waste management, availability of basic supplies and equipment, laboratory diagnostic capacity, and medicines and commodities.
- **Module 3** collected information on service-specific readiness. The twelve sections in this module included specific service areas such as child health (child vaccination, growth monitoring, and curative care), FP, antenatal care (ANC), delivery and newborn care, tuberculosis, NCDs, caesarean delivery, blood typing and compatibility, blood transfusion services, and general facility cleanliness.

The *Health Care Provider* questionnaire collect information from a sample of health service providers. The data included qualifications, training, experience, continuing education, supervision received, and perceptions of the service delivery environment.

# 2.4 SURVEY IMPLEMENTATION

## 2.4.1 Questionnaire Adaptation

The 2014 BHFS questionnaires are based on generic questionnaires developed by the DHS Program. The questionnaires were adapted for Bangladesh health services in consultation with technical specialists and experts from the MOHFW, Directorate General of Health Services (DGHS), Directorate General of Family Planning Services (DGFP), and other key stakeholders knowledgeable about the health services and health sector program priorities covered by the BHFS. The questionnaire adaptation for the 2014 BHFS took place August 18–31, 2013 in Dhaka. A number of consultative meetings with stakeholders, visits to service provision sites, and a two-day questionnaire adaptation workshop elicited the feedback needed to adapt the questionnaires. Attending the workshop were technical experts from the MOHFW; DGHS; DGFP; WHO; USAID; Save the Children, USA; Dhaka University; International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B); and related research organizations.

After being prepared in English, both the Inventory and Health Care Provider questionnaires were translated into Bangla and loaded onto tablet computers, which were used during interviews to record responses to questions.

## 2.4.2 Pre-test

After adaptation and translation of the questionnaires and completion of the CAPI programs, the questionnaires and computer programs were pre-tested. The pre-test was conducted from March 16 to April 8, 2014 in Dhaka. Eleven medical doctors were recruited and trained as interviewers in the application of the questionnaires and computer programs. During the pre-test data collection, health facilities within Dhaka district were surveyed over a four day period to test and refine the survey instruments and the computer programs. After the pre-test, the questionnaires and computer programs were finalized for the main data assessment.

The pre-test also identified the pre-test interviewers who would become master trainers and field supervisors during the main survey. At the end of the pre-test, seven of the eleven medical doctors were identified as master trainers and field supervisors.

# 2.4.3 Main Training

The main training for the 2014 BHFS was conducted from April 27 to May 21, 2014 in Dhaka. Eighty-four (84) sub-assistant community medical officers (SACMOs) were recruited and trained as interviewers in the application of survey instruments and computer programs. The training included classroom lectures and discussions, practical demonstrations, mock interviews, role-plays, and field practices. The trainees were also given daily homework to conduct mock interviews among themselves with the survey tools. The first week of training was dedicated exclusively to train interviewers on the use of paper questionnaires. This phase included two days of field practice to ensure the trainees understood both the content of the questionnaires and approaches for organizing themselves while working in a health facility.

During the second week of training, trainees were introduced to tablet computers and then transitioned to the use of CAPI for both the Inventory and Health Care Provider Interview questionnaires. This was done with completed paper questionnaires from the facilities visited during the pre-test. During the third training week, the trainees practiced all questionnaire types and CAPI approaches in teams and pairs.

The seven medical doctor interviewers from the pre-test conducted the training. Personnel from ICF International provided support as needed.

## 2.4.4 Data Collection

After the training, 40 data collection teams with two interviewers were formed, with one interviewer on each team assigned to the role of the team leader. Data collection was conducted from May 22 to July 20, 2014.

Fieldwork supervision was coordinated by ACPR and NIPORT. The seven medical doctor master trainers and seven trained data processing specialists formed the seven field supervision teams. The field supervision teams conducted periodic visits to their assigned data collection teams to review work and monitor data quality. In addition, supervisory teams from NIPORT periodically visited and monitored the data collection exercise.

## 2.4.5 Data Management and Report Writing

For data collection in every facility, the data collection team used two tablets, one for the *Health Care Provider Interview* data and the second for data from the *Facility Inventory* questionnaire. After completing data collection in each facility, the team merged the inventory and health care provider data. The team leader then reviewed the file, and conducted consistency and structural checks on the data to identify any errors or missing information. When a team was satisfied that data collection and entry were complete for the facility, the team sent the data to the BHFS central office in Dhaka via the Internet, using ICF International's Internet File Streaming System (IFSS). If the facility where the data were collected did not have access to the Internet or other modes of communication that could be used to securely send the completed files, the team sent the data from another location/facility with secure Internet access. The data were also backed up in a pen drive by the team.

Data received from the field were reviewed and checked at the central office with the technical assistance of ICF experts. If any inconsistencies or errors were identified by the central office, the data collection team members reviewed and rechecked the data. If necessary, the team visited the specific service facility again to obtain and resend the correct data to the central office.

Data editing and management activities commenced in May 2014 at the beginning of field work, and ended in July 2014 at the end of data collection in the field.

## 2.4.6 Data Analysis and Report Preparation

The BHFS tabulation plan was based on the model DHS SPA tabulation plan. The preparation of the tables for the report was conducted from August through October 2014. Feedback from NIPORT and the BHFS TWG informed revision of the analysis plan.

Several conventions were observed during the analysis of the 2014 BHFS data:

- First, unless otherwise indicated, the 2014 BHFS considered only those items observed by the interviewers to be available.
- Second, in a majority of facilities, multiple health care providers contribute to the services received by clients. The health care provider who ultimately assessed the client, made the final diagnosis, and prescribed any treatment was therefore identified as the primary provider for the particular service.

The final report was prepared with input from staff members of NIPORT, ICCDR,B and MEASURE Evaluation. The ICF International team provided technical oversight.

## 2.5 SAMPLING

The 2014 BHFS is a cross-sectional study with a stratified random sample of 1,596 health facilities selected from all formal-sector health facilities in Bangladesh.

## 2.5.1 Sample Design

The sample for the 2014 BHFS was designed to include facilities in all seven divisions (Barisal, Chittagong, Dhaka, Khulna, Rajshahi, Rangpur, and Sylhet) of the country. All seven types of public facilities—district hospitals (DHs), maternal and child welfare centers (MCWCs), upazila health complexes (UHCs), upgraded union health and family welfare centers (upgraded UHFWCs), union health and family welfare centers (USCs/RDs), and community clinics (CCs)—as well as private hospitals with at least 20 beds and NGO static clinics/hospitals were included in the study. However, NGOs include facilities run by local government.

## 2.5.2 Sampling Frame

A list of 19,184 registered health facilities, prepared by NIPORT and MOHFW, served as the sampling frame for the BHFS. As indicated in Table 2.1, the distribution of the health facilities at the divisional level is generally similar to the distribution of the population at time of the 2011 Bangladesh census.

The distribution of the registered health facilities by division and by facility type is presented in Table 2.2. The allocation of the 2014 BHFS sample took the divisional distribution of the health facilities into account as well as other factors such as the precision desired for the results at the national and domain levels and the survey budget.

Division	Health facilities numbers <sup>1</sup>	Health facilities distribution	Population <sup>2</sup>	Population distribution
Barisal	1,423	7%	8,325,666	6%
Chittagong	3,523	18%	28,423,019	20%
Dhaka	5,437	28%	47,424,418	33%
Khulna	2,389	12%	15,687,759	11%
Rajshahi	2,714	14%	18,484,858	13%
Rangpur	2,488	13%	15,787,758	11%
Sylhet	1,210	6%	9,910,219	7%
Bangladesh	19,184	100%	144,043,697	100%

<sup>1</sup> List of registered health facilities prepared by NIPORT, MOHFW.

<sup>2</sup> Bangladesh Population and Housing Census 2011, Bangladesh Bureau of Statistics (BBS).2014.

Table 2.2 Bangladesh health facility distribution by division and by health facility types<sup>1</sup>

			UF	IFWC				N	GOs		
Division	СС	USC/RD	FWC	FWC (Upgraded)	UHC	MCWC	DH	Clinic	Hospital	Private Hospital	Total
Barisal	1,001	63	145	105	33	9	6	48	0	13	1,423
Chittagong	2,207	256	396	248	89	20	11	177	5	114	3,523
Dhaka	3,329	374	540	377	105	19	18	406	11	258	5,437
Khulna	1,547	148	277	188	50	14	10	115	0	40	2,389
Rajshahi	1,905	193	170	221	59	13	7	115	1	30	2,714
Rangpur	1,709	187	232	198	50	12	7	78	2	13	2,488
Sylhet	808	85	106	84	33	6	4	52	1	31	1,210
Bangladesh	12,506	1,306	1,866	1,421	419	93	63	991	20	499	19,184

<sup>1</sup> List of registered health facilities prepared by NIPORT, MOHFW.

DH = District hospital, MCWC = Maternal and child welfare center, UHC = Upazila health complex, UHFWC = Union health and family welfare center, USC/RD = Union sub-center/rural dispensary, CC = Community clinic.

#### 2.5.3 Sample of Health Facilities and Outcomes

Unlike the 2009 and 2011 BHFS, the 2014 BHFS is designed to provide the survey results separately for the seven administrative divisions, seven types of public facilities, NGO static clinics/hospitals, and private hospitals. The sample size for the BHFS was determined by a combination of census and random samples (census for DHs and MCWCs; random sample for other facility types). Table 2.3 presents an analysis of the 1,596<sup>2</sup> sampled facilities according to the outcome of the visits to those facilities. In this table and in subsequent tables in the report, the total for facilities is shown including and excluding CCs. The reason for showing the total without community clinics is that CCs are the lowest level of facilities, are supported by community health care providers, and often are the least likely to offer all the health services and /or to have the items necessary for providing service if they offer it.

Table 2.3 Result of facility contact, by background characteristics

Percent distribution of sampled facilities according to result of visit of the survey team to the facility, by background characteristics, Bangladesh HFS 2014

Background	0	Respondent		Closed/ not yet	0.1	<b>T</b> . ( )	Number of facilities
characteristics	Completed	not available	Refused	operational	Others	Total percent	surveyed
Facility type							
District and upazila public facilities	99.7	0.0	0.0	0.3	0.0	100.0	295
DH	100.0	0.0	0.0	0.0	0.0	100.0	62
MCWC	98.9	0.0	0.0	1.1	0.0	100.0	93
UHC	100.0	0.0	0.0	0.0	0.0	100.0	140
Union level public facilities	97.8	0.3	0.0	1.8	0.0	100.0	603
UHFWC	96.8	0.4	0.0	2.9	0.0	100.0	279
UHFWC (upgraded)	98.4	0.8	0.0	0.8	0.0	100.0	122
USC/RD	99.0	0.0	0.0	1.0	0.0	100.0	202
Public community clinic (CC)	97.4	0.5	0.0	2.1	0.0	100.0	431
NGO clinic/hospital	95.7	0.0	0.0	3.0	1.2	100.0	164
Private hospital	84.5	0.0	2.9	11.7	1.0	100.0	103
Location							
Urban	95.1	0.0	0.7	3.6	0.7	100.0	445
Rural	97.7	0.3	0.0	1.9	0.0	100.0	1,151
Division							
Barisal	97.8	0.4	0.0	1.8	0.0	100.0	275
Chittagong	97.1	0.3	0.0	2.6	0.0	100.0	384
Dhaka	94.4	0.3	1.0	4.2	0.0	100.0	287
Khulna	98.8	0.0	0.0	1.3	0.0	100.0	160
Rajshahi	99.4	0.0	0.0	0.6	0.0	100.0	164
Rangpur	97.4	0.7	0.0	2.0	0.0	100.0	152
Sylhet	95.4	0.0	0.0	2.9	1.7	100.0	174
Total	97.0	0.3	0.2	2.4	0.2	100.0	1,596
Total excluding CCs	96.8	0.2	0.3	2.5	0.3	100.0	1,165

Note: The percentages in some rows may not add up to 100 percent due to rounding. Note: DH = District hospital, MCWC = Maternal and child welfare center, UHC = Upazila health complex, UHFWC = Union health and family welfare center, USC/RD = Union sub-center/rural dispensary, CC = Community clinic.

As shown in Table 2.3, data were successfully collected from 97 percent of the 1,596 sampled facilities. Interviewers were not able to survey 3 percent of sampled facilities because some facilities were closed or not yet operational at the time of the survey. The survey protocol allowed for facilities that could not be surveyed to be replaced with the nearest facility of the same type, in the same district, and under the same managing authority. However, no facilities that met the replacement criteria were found. Consequently, data are available in the BHFS for 1,548 facilities. Table 2.4 shows the distribution of surveyed facilities by background characteristics.

Appendix Tables A-2.1 through A-2.8 provide more information on the surveyed facilities.

<sup>&</sup>lt;sup>2</sup> A total of 1,600 facilities were selected originally for the BHFS sample; however, four sampled facilities were found to be duplicates; this reduced the original sample size from 1,600 to 1,596.

Table 2.4 Distribution of surveyed facilities, by background characteristics

Percent distribution and number of surveyed facilities, by background characteristics, Bangladesh HFS 2014

	Weighted percent	Number of fac	cilities surveyed
Background characteristics	distribution of	Weighted	Unweighted
characteristics	surveyed facilities	weighted	Unweighted
Facility type			
District and upazila public facilities	3.1	47	294
DH	0.3	5	62
MCWC	0.5	8	92
UHC	2.2	35	140
Union level public facilities	24.1	374	590
UHFWC	9.6	149	270
UHFWC (upgraded)	7.6	117	120
USC/RD	7.0	108	200
Public community clinic (CC)	65.2	1,010	420
NGO clinic/hospital <sup>1</sup>	5.2	81	157
Private hospital	2.3	36	87
Location			
Urban	8.4	130	423
Rural	91.6	1,418	1,125
Division			
Barisal	7.5	116	269
Chittagong	18.6	287	373
Dhaka	27.2	421	271
Khulna	12.7	197	158
Rajshahi	14.5	224	163
Rangpur	13.3	205	148
Sylhet	6.2	97	166
Total	100.0	1,548	1,548
Total excluding CCs	NA <sup>2</sup>	538	1,128

<sup>2</sup> Not Applicable.

## 2.5.4 Sample of Health Service Providers

The sample of health service providers was selected from providers who were present in the facility on the day of the assessment and who provided services assessed by the 2014 BHFS. For purposes of the BHFS data collection, a health service provider was defined as a person who provides consultation services, counseling, health education, or laboratory services to clients. Health workers were not eligible for interviewing, for example, if they only take measurements or complete registers and do not provide any type of professional client services. In each facility, the aim was to interview an average of eight providers who provided the range of services being assessed. In facilities with less than eight health care providers, all providers present on the day of the visit were interviewed. In facilities with more than eight providers, efforts were made to interview eight providers, including all providers who provided information for any section of the Facility Inventory questionnaire and other providers involved in delivering the services for which information was collected in the BHFS. In a few cases, the staff members present on the day of the assessment may not have been representative of the staff that usually provides the services being assessed<sup>3</sup>. The health care provider data were weighted during analysis to account for the differentials from oversampling or under-sampling of providers with a particular qualification in a facility type, location, or division.

Table 2.5 shows the distribution of health care providers who were interviewed with the Health Care Provider questionnaire, by background characteristics and provider qualification. A total of 4,298 providers were interviewed, with most conducted in CCs (48 percent).

Appendix Table A-2.9 provide additional information on the health care providers who were interviewed.

<sup>&</sup>lt;sup>3</sup> For example, the BHFS visit may have taken place at the same time as an offsite training event for a group of specialists or on a day when evaluations took a certain type of provider away from services.

## Table 2.5 Distribution of interviewed providers

Percent distribution and number of interviewed providers, by background characteristics and provider qualification, Bangladesh HFS 2014

	Weighted percent	Number of inter	rviewed providers
Background characteristics	distribution of interviewed providers	Weighted	Unweighted
Facility type			
District and upazila public facilities	16.1	692	1,985
DH	3.1	133	567
MCWC	1.0	43	315
UHC	12.0	516	1,103
Union level public facilities	19.9	854	955
UHFWC	7.9	340	431
UHFWC (upgraded)	6.4	274	200
USC/RD	5.6	241	324
Public community clinic (CC)	47.9	2,058	619
NGO clinic/hospital	8.9	381	436
Private hospital	7.3	312	303
Location			
Urban	25.4	1,092	2,150
Rural	74.6	3,206	2,148
Division			
Barisal	6.9	297	677
Chittagong	19.1	820	1,066
Dhaka	33.2	1,426	863
Khulna	12.6	540	472
Rajshahi	12.6	543	397
Rangpur	9.8	423	371
Sylhet	5.8	248	452
Provider type			
Specialist <sup>1</sup>	2.8	120	254
General practitioner <sup>2</sup>	8.1	347	694
Paramedics <sup>3</sup>	27.3	1,174	1,759
Nurse/midwife <sup>4</sup>	7.6	329	592
Medical/pharmaceutical technician <sup>5</sup>	3.6	153	256
Other health providers <sup>6</sup>	50.6	2,175	743
Total	100.0	4,298	4,298
Total excluding CCs	NA	2,240	3,679

NA = Not applicable

<sup>1</sup> Specialist (consultant) medicine [including cardiology], Specialist (consultant) general surgery, Specialist (consultant) obstetrics/gynecology, Specialist (consultant) pediatrics, Specialist (consultant) psychiatry, Specialist (consultant) anesthesia or any other specialist not listed above.
 <sup>2</sup> Medical Officer (MBBS) (any non-specialist doctor, including Assistant Surgeon, Emergency Medical Officer (EMO), Indoor Medical Officer (IMO), Maternal and Child Health/Family Planning Medical Officer (MCH/FP), Residential Medical Officer (RMO), regardless of designation or title) or Medical Officer - Anesthetist or Dental Surgeon.

<sup>3</sup> SACMO/Medical Assistant, Family Welfare Visitor (FWV), or Paramedics.
 <sup>4</sup> Nurse/midwife, Matron, Nursing Supervisor, Senior Staff Nurse, Assistant Nurse/Staff Nurse or Midwife.
 <sup>5</sup> Medical Technologist-Laboratory or Medical Technologist-EPI.
 <sup>6</sup> Family Welfare Assistant (FWA), Health Assistant, Community Health Care Provider (CHCP), Health Inspectors, Assistant Health Inspectors, Nutritionist or Health Educator, Other Providers.

## **Key Findings**

- Nearly all health facilities in Bangladesh offer services on antenatal care (ANC) and outpatient curative care for sick children. The majority of the health facilities (above 80 percent) also provide modern family planning services. Normal delivery (18 percent) and tuberculosis (TB) diagnosis/treatment services (10 percent) are less commonly available. Caesarean delivery is the least available service (four percent).
- Almost 80 percent of the all health facilities, excluding community clinics (CCs), are connected to the national electricity grid and 45 percent of these facilities have regular electricity. One-fifth of CCs have electric connection with the national electric grid, while only nine percent of CCs have regular electricity.
- One third of facilities have computer with Internet. On the day of survey, more computers were functioning at district and upazila facilities (90 percent) than at CCs (42 percent) and union level facilities (24 percent).
- Basic diagnostic capacity<sup>1</sup> in health facilities is low. Only one in ten facilities has provision for the hemoglobin test (most common); other tests are even less available in all facilities. Advanced level diagnostic tests are also very low (maximum four percent).
- About eight in ten facilities have syringes and needles and can safely dispose of sharps waste. Medical masks and guidelines for infection control and sterilization equipment were least available in facilities.
- Nongovernmental organizations (NGOs) are most likely to have standard precaution items for infection control, followed by district and upazila level public facilities and private hospitals.
- Essential medicine<sup>2</sup> in drug and dietary supply (DDS) kits such as Amoxicillin tablet and syrup, Paracetamol tablet and syrup, and Cotrimoxazole is widely available (above 80 percent) in all facilities, while Vitamin A and iron tablets are the least available medicines (40 percent and 50 percent, respectively).
- Sixty-two percent of physician's positions are filled at district and upazila facilities, whereas less than one fourth of the sanctioned positions at union level facilities are currently filled.
- More than 80 percent of the nurses' positions in district and upazila public facilities and NGO facilities are filled; private facilities have more nurses than sanctioned positions.

# 3.1 BACKGROUND

o improve the health status of the population, a health system needs essential inputs and requisite support systems that promote effective, efficient delivery of health services. Although health care services can be offered under various conditions, some common inputs are crucial under all

<sup>&</sup>lt;sup>1</sup> Basic laboratory diagnostic tests are hemoglobin, blood glucose, urine protein, urine glucose, and urine pregnancy tests.

<sup>&</sup>lt;sup>2</sup> Eight essential medicines of a DDS kit include: Amoxicillin tablet/capsule, Amoxicillin syrup, Paracetamol tablet, Paracetamol syrup, Tetracycline/Cloramphenicol eye ointment, Cotrimoxazole, Iron tablets, and Vitamin A capsules.

conditions to ensure the quality of services, their acceptability, and their utilization. These essential inputs include human resources and equipment, as well as pharmaceutical and medical supplies.

This chapter reports results from the 2014 Bangladesh Health Facility Survey (BHFS) on the availability of basic health services and essential resources, and on management and support systems at the facility level. The chapter is divided into three parts:

- Availability of services. Section 3.2, including Tables 3.1 through 3.8.2, and Figures 3.1 through 3.16, describes the availability of client services in Bangladesh health care facilities and reports on a range of indicators recommended by WHO to assess the readiness of facilities to provide good quality client services that include the availability of basic amenities and equipment, infection control processes, diagnostic capacity, and essential medicines.
- **Basic management and support.** Section 3.3, including Tables 3.9 and 3.10, considers the extent to which essential management and administrative systems are in place to support the provision of quality services that include quality assurance monitoring and supportive management practices.
- **Staffing.** Section 3.4, including Table 3.11 and Figures 3.17 through 3.20, provides information on staffing patterns at the different facility levels.

## 3.2 AVAILABILITY OF SERVICES

## 3.2.1 Overall Availability of Specific Client Services

Policy makers and program managers are interested in the overall availability of health services in Bangladesh in order to identify gaps in the provision of key services. Table 3.1 provides information on the percentages of all facilities that offer various client services.

Nearly all health facilities in Bangladesh offer ANC services (97 percent) and outpatient curative care for sick children (93 percent). More than eight of every ten health facilities provide some family planning (FP) services. More than three-quarters of facilities offer child vaccination with the support of the Extended Program of Immunization (EPI), and six in ten facilities offer child growth monitoring. Two in ten Table 3.1 Availability of specific services

Among all facilities, the percentages and numbers that offer specific services, Bangladesh  ${\rm HFS}\ 2014$ 

	Percentage of	Number of faciliti	ies offering service
Service provided	facilities offering service (weighted)	Weighted	Unweighted
Curative care for sick children	92.6	1,433	1,457
Child growth monitoring	62.1	962	1,013
Child vaccination (EPI) <sup>1</sup>	78.4	1,213	1,145
Any family planning <sup>2</sup>	82.7	1,281	1,303
Antenatal care	97.4	1,508	1,493
Normal delivery	18.1	280	586
Caesarean delivery <sup>3</sup>	4.0	62	255
TB diagnosis or treatment <sup>4</sup>	9.6	148	337
Non-communicable disease5	13.6	210	418
Total	-	1,548	1,548

<sup>1</sup> Routine series of DPT/Pentavalent, polio, and measles vaccinations offered from the facility, excluding any outreach services.

<sup>2</sup> Facility provides, prescribes, or counsels clients on any of the following: contraceptive pills (combined or progestin-only), injectables (combined or progestin-only), implants, IUCDs, male condoms, female sterilization (tubal ligation), male sterilization (vasectomy), periodic abstinence method, or LAM.

<sup>3</sup> Facility reports that it provides caesarean delivery services in facility.

 <sup>4</sup> Facility reports that providers assigned to the facility diagnose TB, prescribe treatment for TB, or provide TB treatment follow-up services for clients put on treatment elsewhere.
 <sup>5</sup> Facility reports that it provides diagnosis or management of non-communicable diseases,

especially diabetes and cardiovascular diseases.

facilities offer normal delivery services. The least available service—caesarean delivery—is offered by just 4 percent of all facilities in Bangladesh; this reflects the fact that caesarean deliveries are performed only at hospitals. Fourteen percent of facilities offer services related to non-communicable diseases (NCDs), especially diabetes and cardiovascular diseases. About one in ten facilities provide TB diagnosis or treatment.

## 3.2.2 Availability of Basic Client Services

The availability of a basic package of health services, the frequency with which these services are offered, the presence of qualified staff for their delivery, and the overall ease of access to the health care system all contribute to client utilization of services at a health facility.

The BHFS defines basic client services as the following:

- Outpatient curative care for sick children.
- Child growth monitoring services.
- Facility-based child vaccination services.
- Provision of any modern method of FP.
- Antenatal care (ANC).
- Normal delivery.

Table 3.2<sup>3</sup> and Figure 3.1 present information on the availability of FP and basic maternal and child health (MCH) services. Over 90 percent of all facilities offer ANC and child curative care services. Family planning and child vaccination services are available in about 80 percent of all facilities. Normal delivery services are the least likely to be available, with less than one in five facilities offering normal delivery services. As seen in Table 3.2, normal delivery services are offered, on average, by over 90 percent of district and upazila public facilities and private hospitals. Close to 50 percent of upgraded UHFWCs provide normal delivery service compared with one quarter or less of other union level facilities. Only 7 percent of CCs offer normal delivery services.

Table 3.2 shows that when CCs are excluded from the analysis, two major differences in service availability are observed. The percentage of facilities that offer normal delivery increases from 18 percent to 39 percent and the availability of child vaccination services declines from 78 percent to 65 percent. The increase in the percentage of facilities that offer delivery care when CCs are excluded is not surprising because CCs do not offer delivery care. The decrease in vaccination services when CCs are excluded points to the key role that CCs play in child vaccinations. The BHFS found that only two-thirds of union level health facilities offer the services compared with 94 percent of district and upazila facilities and 86 percent of CCs.<sup>4</sup> Child vaccination services are offered by the majority of NGO facilities (71 percent) but by only around 1 in 6 private hospitals.

<sup>&</sup>lt;sup>3</sup> In Table 3.2, summary statistics are presented for all facilities including CCs and excluding CCs. The results for all facilities including CCs are disaggregated by facility type, location, and division. A similar format is followed in most of the other tables in the report.

<sup>&</sup>lt;sup>4</sup> District and upazila level public facilities offer child vaccination services while other public facilities offer vaccination services with the help of outreach EPI program.

## Table 3.2 Availability of basic client services

Among all facilities, the percentages offering indicated basic client services and all basic client services, by background characteristics, Bangladesh HFS 2014

Background characteristics	Child curative care	Child growth monitoring services	Child vaccination services	Any modern methods of family planning	Antenatal care services	Normal delivery	All basic client services with normal delivery <sup>1</sup>	All basic client services without normal delivery	Number of facilities
Facility type									
District and upazila public facilities DH MCWC UHC	<b>96.6</b> 100.0 93.5 96.7	<b>76.9</b> 74.2 73.9 78.0	<b>93.7</b> 91.9 66.3 100.0	<b>94.2</b> 59.7 96.7 98.7	<b>99.1</b> 98.4 100.0 99.0	<b>95.7</b> 98.4 90.2 96.6	<b>67.5</b> 46.8 41.3 76.4	<b>69.4</b> 46.8 45.7 78.0	<b>47</b> 5 8 35
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>96.1</b> 97.0 96.6 94.4	<b>66.3</b> 70.6 71.4 55.0	<b>64.1</b> 64.7 65.7 61.7	<b>83.4</b> 93.1 91.8 60.7	<b>95.3</b> 98.2 99.0 87.3	<b>27.7</b> 24.5 47.2 10.9	<b>14.3</b> 13.6 22.8 6.1	<b>43.0</b> 48.3 49.8 28.2	<b>374</b> 149 117 108
Public community clinic (CC)	92.7	60.9	85.7	81.6	98.8	7.2	2.5	44.3	1,010
NGO clinic/hospital	82.9	68.7	71.0	88.3	97.9	30.8	14.2	48.2	81
Private hospital	68.2	19.5	15.6	20.5	78.5	93.2	8.2	8.2	36
<b>Location</b> Urban Rural	81.6 93.6	55.2 62.8	63.7 79.7	72.4 82.2	92.7 97.8	63.1 14.0	25.5 6.5	42.2 44.3	130 1,418
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	96.0 92.1 90.0 98.6 85.0 95.5 99.8	60.1 56.6 60.7 66.5 53.6 77.3 65.8	84.7 76.8 68.1 82.3 82.3 85.7 87.2	88.0 82.9 66.9 93.5 75.4 94.1 94.1	98.8 97.4 97.9 96.7 94.5 98.9 98.8	13.0 20.0 23.0 12.6 15.7 16.1 18.1	7.1 8.2 7.8 8.1 5.2 11.5 9.2	47.3 38.2 31.7 55.8 36.6 67.0 57.8	116 287 421 197 224 205 97
Total	92.6	62.1	78.4	81.4	97.4	18.1	8.1	44.2	1,548
Total excluding CCs	92.3	64.5	64.6	80.9	94.9	38.5	18.6	43.8	538

<sup>1</sup> Basic client services include outpatient curative care for sick children, child growth monitoring, facility-based child vaccination services, any modern methods of family planning, antenatal care, and normal delivery.

Table 3.2 and Figure 3.1 also show that, on average, 44 percent of all facilities provide all the basic services except delivery care, i.e., child curative care, child growth monitoring, child vaccination, FP, and ANC. This proportion does not change when CCs are excluded from the analysis. Among all facility types, upazila health complexes (UHCs) are most likely to offer all of the five basic health services (78 percent), while private hospitals are least likely to provide these basic services (8 percent).



Figure 3.1 Availability of basic client services in health facilities

# 3.2.3 General Service Preparedness

The BHFS collected information to assess the general preparedness of health facilities to offer quality health services. According to WHO (2013), an assessment of the general preparedness of the facility to provide quality services should consider the following six components:

- Basic amenities for client services.
- Basic equipment to support quality health services.
- Standard precaution for infection control in service delivery areas.
- Capacity for adherence to standards for quality sterilization.
- Diagnostic capacity.
- Availability of essential medicine.

During data collection, the BHFS interviewers verified that all components were present in the facility and in working order.

The following sections present information from the BHFS on each of the six components in an assessment of general preparedness of health facilities.

## Basic Amenities for Client Services

All components reviewed here are neither necessary nor sufficient to provide quality services. However, the availability of the following basic amenities are important to a client's satisfaction with health services rendered at a facility:

- Regular electricity.
- Improved water source.
- Privacy during consultation.

- Client latrine.
- Communication equipment (land/mobile phone). •
- Computer with Internet access.

In addition to these basic amenities, the BHFS also considered the availability of emergency transport, another key component of client services. Emergency transport is expected to be available primarily in higher level facilities; its availability also depends upon the services provided by the facility.

Table 3.3 Availability of basic amenities for client services

Among all facilities, the percentages with indicated amenities considered basic for quality services, by background characteristics, Bangladesh HFS 2014

					Amenities					
Background characteristics	National electricity grid	Regular electricity <sup>1</sup>	Improved water source <sup>2</sup>	Visual and auditory privacy <sup>3</sup>	Client latrine <sup>4</sup>	Communi- cation equipment⁵	Computer with Internet <sup>6</sup>	Emergency transport <sup>7</sup>	Separate latrine for female clients	Number of facilities
Facility type										
District and upazila public facilities DH MCWC UHC	<b>97.2</b> 100.0 95.7 97.1	<b>75.5</b> 90.3 79.3 72.5	<b>95.6</b> 96.8 96.7 95.1	<b>44.8</b> 46.8 50.0 43.4	<b>86.0</b> 88.7 83.7 86.1	<b>79.5</b> 88.7 58.7 82.7	<b>77.7</b> 90.3 28.3 86.7	<b>80.2</b> 91.9 57.6 83.4	<b>73.9</b> 67.7 65.2 76.7	<b>47</b> 5 8 35
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>71.7</b> 66.1 75.0 76.0	<b>28.1</b> 28.0 31.1 24.8	<b>88.1</b> 87.4 91.5 85.4	<b>40.6</b> 42.4 41.1 37.7	<b>74.4</b> 75.7 74.4 72.5	<b>14.1</b> 15.2 11.2 15.7	<b>11.0</b> 5.8 10.0 19.1	- - -	<b>35.3</b> 35.5 39.8 30.3	<b>374</b> 149 117 108
Public community clinic (CC) <sup>8</sup>	21.2	9.1	84.6	32.2	68.0	12.4	41.5	-	14.4	1,010
NGO clinic/ hospital	95.8	80.9	94.9	78.3	88.3	65.6	61.3	15.5	70.8	81
Private hospital	89.5	98.4	98.2	94.4	94.3	97.6	49.1	57.2	82.5	36
<b>Location</b> Urban Rural	94.6 36.3	84.8 15.7	96.1 85.8	74.3 35.2	90.2 70.1	77.1 14.3	60.9 34.2	44.8 0.9	71.5 21.6	130 1,418
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	25.8 40.2 46.1 48.1 37.1 43.1 33.7	16.3 20.1 23.2 34.3 12.8 21.5 19.2	67.1 87.9 82.2 88.5 94.9 94.9 85.4	28.4 43.9 31.5 27.8 50.1 48.2 39.3	70.2 74.1 61.8 73.0 74.6 78.5 87.3	17.9 14.8 23.0 20.3 16.0 20.9 25.3	29.9 40.6 28.4 44.4 28.7 56.7 26.1	4.9 5.5 5.5 4.3 2.6 3.4 5.5	24.8 23.3 26.0 26.3 23.2 31.4 27.2	116 287 421 197 224 205 97
Total	41.2	21.5	86.6	38.5	71.8	19.6	36.5	4.6	25.8	1,548
Total excluding CCs	78.8	44.9	90.5	50.2	78.8	33.2	27.0	13.2	47.2	538

Note: The indicators presented in this table are the basic amenities domain for assessing general service readiness within the health facility assessment methodology proposed by WHO and USAID (WHO 2012).

"-" Means facilities below district level do not have the provisions to provide emergency transport.

<sup>1</sup> Facility is connected to a central power grid and there was no interruption in power supply lasting for more than two hours at a time during normal working hours in the seven days before the survey, or facility has a functioning generator with fuel available on the day of the survey, or else facility has back-up solar power. <sup>2</sup> Water is piped into facility or piped onto facility grounds, or water is available from a public tap or standpipe, a tube well or borehole, a protected dug well, protected spring, or rain water, or bottled water and the outlet from this source is within 500 meters of the facility.

<sup>3</sup> A private room or screened-off space available in the general outpatient service area that is a sufficient distance from other clients so that a normal conversation could be held without the client being seen or heard by others.

<sup>4</sup> The facility has a functioning flush or pour-flush toilet, a ventilated improved pit latrine, or composting toilet.

 <sup>5</sup> The facility has a functioning land-line telephone, a functioning facility-owned cellular phone, or a private cellular phone that is supported by the facility.
 <sup>6</sup> The facility has a functioning computer with access to the Internet that is not interrupted for more than two hours at a time during normal working hours, or facility has access to the Internet via a cellular phone inside the facility.

<sup>7</sup> The facility has a functioning ambulance or other vehicle for emergency transport that is stationed at the facility and had fuel available on the day of the survey. <sup>8</sup> CCs do not have any emergency transport but 500 CCs provide three wheelers for their clients.

Table 3.3 and Figure 3.2 provide information on the availability of these basic amenities for client services.

**Electricity.** The BHFS obtained information on the connectivity of the facilities with the national electricity grid line and the availability of regular electricity. Regular electricity is considered to be available at a facility if one of the following conditions is met: the facility is connected to a central power grid, and the power supply was not interrupted for more than two hours at a time during normal working hours in the seven days before the survey; the facility has a functioning generator with fuel available on the day of the survey; or the facility has back-up solar power. Only 4 in 10 health facilities (79 percent excluding CCs) are connected to the national electricity grid and, according to the survey definition, 22 percent (45 percent excluding CCs) of facilities have regular electricity. Seventy-six percent of district and upazila public facilities, 81 percent of NGO facilities, and 98 percent of private hospitals have regular electricity. One-fifth of CCs have an electric connection with national electric grid, although only 9 percent have regular electricity.

**Improved water source.** In general, 87 percent (91 percent excluding CCs) of facilities have an improved water source in the facility. By facility type, the proportion with an improved water source varies from 85 percent in CCs and USCs/rural dispensaries (RDs) to 98 percent in private hospitals. Rural facilities (86 percent) are less likely than urban facilities (96 percent) and facilities in the Barisal division (67 percent) are less likely than those in the other divisions to have an improved water source.



Figure 3.2 Availability of basic amenities for client services in health facilities

**Visual and auditory privacy.** Maintaining privacy during a consultation with a health care provider is an important element of quality of care. A lack of privacy makes it difficult for clients to speak freely with health care providers. Only 39 percent (50 percent excluding CCs) of facilities have the capacity to assure privacy for clients during a consultation. Half or less of public facilities are able to provide clients with visual and auditory privacy, as compared to 78 percent of NGO facilities and 94 percent of private hospitals.

**Client latrine.** On average, 72 percent (79 percent excluding CCs) of facilities have a functioning client latrine. Union level public facilities (74 percent) and CCs (68 percent) are less likely than district and upazila public facilities (86 percent), private hospitals (94 percent), and NGO facilities (88 percent) to have a functioning client latrine. Availability of an improved female toilet refers a separate female toilet with a functional water source. Around a quarter (47 percent excluding CCs) of facilities have a separate, improved

latrine for women and girls, a finding similar to that found in the 2011 BHFS (45 percent). Although the availability of a separate toilet is low, especially in union level facilities and CCs, most public facilities that have only one toilet consider it a female toilet.

**Communication equipment.** Figure 3.3 shows that 20 percent (33 percent excluding CCs) of facilities have a functional land/mobile phone. District and upazila public facilities (80 percent), private hospitals (98 percent), and NGO facilities (66 percent) are more likely to have a land/mobile phone than union level facilities (14 percent) and CCs (12 percent). There is typically no provision for land or mobile phones at CCs but CC providers may use their private mobile phones with the cost supported by the facility in some cases.



Figure 3.3 Availability of communication equipment, by facility type

**Computer.** Figure 3.4 shows that more than 60 percent (49 percent excluding CCs) of facilities have a computer, and 42 percent (41 percent excluding CCs) had a functioning computer on the day of survey. Thirty-seven percent (27 percent excluding CCs) of facilities have a computer with Internet access. Union level health facilities (11 percent) and maternal and child welfare centers (MCWCs) (28 percent) are less likely to have a computer with Internet access than other facilities.

**Emergency transport.** Overall, transport for emergencies is available in only 5 percent (13 percent excluding CCs) of facilities. District and upazila level public facilities (80 percent) and private hospitals (57 percent) are much more likely than NGO facilities (16 percent) to have transport for emergencies. At public facilities, emergency transport is expected to be available primarily in upper level facilities; availability also depends upon the services provided by the facility. Thus, it is not surprising that there is considerable variability in the availability of emergency transport at public facilities. Over 90 percent of district hospitals, 83 percent of UHCs, and 58 percent of MCWCs have transport for emergencies, while union level public facilities and CCs do not have emergency transport.



Figure 3.4 Availability of a computer, by facility type

\* The facility has a functioning computer with access to the Internet that is not interrupted for more than 2 hours at a time during normal working hours, or facility has access to the Internet via a cellular phone inside the facility. BHFS 2014

In summary, the ideal facility should have a safe and welcoming environment with regular electricity, an improved water source, privacy during consultation, a client latrine, a land/mobile phone, and a computer with Internet access. Figure 3.5 presents information on the availability of at least five out of these six amenities in health facilities in Bangladesh, by facility type.

Overall, only 11 percent (24 percent excluding CCs) of facilities have at least five out of the six basic amenities. The low proportion is due primarily to the limited availability of computers with Internet at union-level facilities and of regular electricity in most CCs.

# *Figure 3.5* Availability of at least five basic amenities in health facilities, by facility type



## Basic Equipment to Support Quality Health Services

Delivery of quality basic health services requires certain equipment. WHO and USAID have proposed a list of seven basic pieces of equipment that should be available at a health facility to guarantee its readiness to deliver basic health services (WHO 2012). The basic equipment considered necessary to support quality health services includes:

- Adult scale.
- Child scale.
- Infant scale.
- Thermometer.
- Stethoscope.
- Blood pressure apparatus.
- Light source.

Table 3.4 and Figure 3.6 report provide information from the BHFS on the availability of this basic equipment.

## Table 3.4 Availability of basic equipment

Among all facilities, the percentages with equipment considered basic to guality client services available in the general outpatient service area, by background characteristics, Bangladesh HFS 2014

				Equipment				
Background characteristics	Adult scale	Child scale <sup>1</sup>	Infant scale <sup>2</sup>	Thermo- meter	Stethoscope	Blood pressure apparatus <sup>3</sup>	Light source <sup>4</sup>	Number of facilities
Facility type								
District and upazila public facilities DH MCWC UHC	<b>81.9</b> 83.9 90.2 79.8	<b>70.3</b> 83.9 75.0 67.3	<b>59.1</b> 71.0 66.3 55.8	<b>93.6</b> 95.2 88.0 94.6	<b>97.5</b> 98.4 94.6 98.0	<b>94.0</b> 95.2 92.4 94.1	<b>74.1</b> 87.1 75.0 72.0	<b>47</b> 5 8 35
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>74.7</b> 73.7 87.0 62.7	<b>56.4</b> 50.6 71.6 47.7	<b>33.8</b> 27.6 48.0 26.7	<b>77.5</b> 75.1 72.7 86.0	<b>91.9</b> 92.7 88.9 94.3	<b>84.1</b> 83.9 80.4 88.2	<b>40.1</b> 41.6 36.6 42.0	<b>374</b> 149 117 108
Public community clinic (CC) NGO clinic/hospital	84.2 90.8	47.5 76.0	21.2 64.8	95.6 98.5	91.1 100.0	86.0 99.3	32.9 84.4	1,010 81
Private hospital	72.3	69.0	66.6	96.8	96.8	95.2	87.4	36
Location Urban Rural	83.9 81.7	72.8 50.4	63.0 25.6	96.6 90.8	98.9 91.5	97.2 85.7	83.2 35.9	130 1,418
<b>Division</b> Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	85.8 85.8 68.2 86.4 84.1 90.7 92.0	54.7 50.9 39.9 52.3 44.8 81.6 62.6	26.3 25.2 25.6 27.6 24.8 45.3 32.1	90.7 91.9 88.7 88.0 93.3 97.6 90.4	87.8 88.8 90.5 98.9 93.7 96.1 87.9	82.3 86.5 82.1 92.9 87.7 95.5 78.5	34.8 34.2 36.9 43.0 38.4 52.8 45.7	116 287 421 197 224 205 97
Total	81.9	52.3	28.7	91.3	92.1	86.7	39.9	1,548
Total excluding CCs	77.6	61.4	42.8	83.4	94.0	88.0	52.9	538

Note: The indicators presented in this table comprise the basic equipment domain for assessing general service readiness within the health facility assessment methodology proposed by WHO and USAID (WHO 2012).

<sup>1</sup> A scale with gradation of 250 grams, or a digital standing scale with a gradation of 250 grams or lower where an adult can hold a child to be weighed, available somewhere in the general outpatient area. <sup>2</sup> A scale with gradation of 100 grams, or a digital standing scale with a gradation of 100 grams where an adult can hold an infant to be weighed,

available somewhere in the general outpatient area.

<sup>3</sup> A digital blood pressure machine or a manual sphygmomanometer with a stethoscope, available somewhere in the general outpatient area. A spotlight source that can be used for client examination or a functioning flashlight, available somewhere in the general outpatient area.

Eight in 10 or more of all Bangladesh health facilities have a stethoscope, thermometer, blood pressure apparatus, and adult weighing scale available. In contrast, a child scale and an infant scale are found in only 52 percent and 29 percent of facilities, respectively. Only about two in five facilities have a light source for focused client examination.

Figure 3.6 shows that only a quarter of all facilities (35 percent excluding CCs) have all of the following six basic items of equipment: stethoscope, thermometer, blood pressure apparatus, adult scale, child scale/infant scale, and light source. The availability of a child and an infant scale was combined for purposes of the figure because of the unavailability of infant scales in some government-managed health facilities, where a child scale is used for weighing infants.



# Figure 3.6 Availability of basic equipment for client services in health facilities

Figure 3.7 presents an additional summary measure, the availability of at least five basic items of equipment (out of the six items shown in Figure 3.6) by facility type. A majority of district and upazila facilities (77 percent), NGO facilities (90 percent), and private hospitals (79 percent) have at least five basic pieces of equipment. Half of union level facilities and CCs have at least five items. Overall, only 55 percent (62 percent excluding CCs) of facilities have at least five basic items of equipment.



*Figure 3.7* Availability of at least five basic items of equipment in health facilities, by facility type

## Basic Items for Infection Control in Service Delivery Areas

Around the world, infections acquired in a health facility (known as nosocomial infections) often complicate the delivery of health care. Strict adherence to infection control guidelines and constant vigilance are necessary to prevent such infections. It is essential that a health facility have the supplies and equipment for infection control appropriate to the services offered. Table 3.5 provides information for 18 items considered important for compliance with standard precautions for infection control in service delivery areas.

## Table 3.5 Standard precautions for infection control

Percentages of facilities with sterilization equipment somewhere in the facility and other items for standard precautions available in the general outpatient area of the facility on the day of the survey, by background characteristics, Bangladesh HFS 2014

Items	District and upazila public facilities	DH	MCWC	UHC	Union level public facilities	UHFWC	UHFWC (up- graded)	USC/RD	Public com- munity clinic (CC)	NGO clinic/ hospital	Private hospital	Total	Total excluding CCs
Sterilization													
equipment <sup>1</sup>	72.7	91.9	72.8	69.9	17.6	18.9	23.3	9.7	3.9	76.7	85.8	15.0	35.9
Equipment for high-													
level disinfection <sup>2</sup>	58.1	69.4	59.8	56.1	32.4	38.0	29.4	27.8	22.9	53.6	48.5	28.5	38.9
Safe final disposal of													
sharps waste <sup>3</sup>	74.0	71.0	83.7	72.3	76.4	78.7	75.5	74.2	81.8	84.9	86.3	80.6	78.1
Safe final disposal of													
infectious waste4	77.1	79.0	83.7	75.4	79.5	80.0	79.3	79.1	82.9	88.4	89.7	82.4	81.3
Appropriate storage of													
sharps waste5	75.2	77.4	80.4	73.7	46.8	55.4	40.7	41.7	67.3	78.8	72.2	63.3	55.8
Appropriate storage of													
infectious waste <sup>6</sup>	59.3	75.8	46.7	59.6	23.7	27.1	20.9	21.9	25.3	62.5	61.9	28.8	35.2
Disinfectant <sup>7</sup>	75.4	82.3	77.2	74.1	56.6	63.8	53.9	49.5	51.7	82.1	80.8	55.9	63.7
Syringes and needles <sup>8</sup>	85.0	85.5	89.1	84.0	75.6	84.1	81.5	57.4	77.3	89.1	80.9	77.8	78.8
Soap	88.0	83.9	90.2	88.2	77.3	76.9	82.7	71.8	74.2	91.1	89.3	76.6	81.1
Running water <sup>9</sup>	87.9	85.5	88.0	88.2	57.6	56.9	66.1	49.3	37.4	92.4	89.4	47.9	67.6
Soap and running													
water	84.5	79.0	84.8	85.2	53.7	55.3	62.0	42.3	34.8	88.8	86.7	44.9	63.9
Alcohol-based hand													
disinfectant	60.8	59.7	58.7	61.5	27.2	30.8	22.7	27.3	28.7	66.8	65.4	32.1	38.7
Soap and running													
water or else alcohol-													
based hand													
disinfectant	88.3	80.6	89.1	89.3	62.1	62.1	69.4	54.2	45.7	90.2	89.3	54.3	70.5
Latex gloves <sup>10</sup>	74.3	74.2	78.3	73.4	56.6	61.2	63.3	42.9	61.5	81.4	60.7	61.8	62.2
Medical masks	64.3	66.1	67.4	63.3	29.6	29.8	35.5	22.8	18.0	72.2	66.9	26.2	41.5
Gowns	47.1	54.8	54.3	44.4	20.9	21.1	23.7	17.4	23.0	65.2	57.7	26.2	32.3
Eye protection	24.0	37.1	22.8	22.3	10.0	9.3	9.3	11.8	4.3	47.0	30.0	9.1	18.2
Guidelines for standard													
precautions <sup>11</sup>	33.1	51.6	34.8	30.0	16.2	16.5	15.9	16.1	14.9	52.5	23.7	17.9	23.7
Number of facilities	47	5	8	35	374	149	117	108	1,010	81	36	1,548	538

Note: The indicators presented in this table comprise the standard precautions domain for assessing general service readiness within the health facility assessment methodology proposed by WHO and USAID (WHO 2012).

<sup>1</sup> Facility reports that some instruments are processed in the facility and the facility has a functioning electric dry heat sterilizer, a functioning electric autoclave, or a non-electric autoclave with a functioning heat source available somewhere in the facility.

<sup>2</sup> Facility reports that some instruments are processed in the facility and the facility has an electric pot or other pot with heat source for high-level disinfection by boiling or high-level disinfection by steaming, or else facility has chlorine, formaldehyde, CIDEX, or glutaraldehyde for chemical high-level disinfection available somewhere in the facility on the day of the survey.

<sup>3</sup> The process of sharps waste disposal is incineration and the facility has a functioning incinerator with fuel on the day of survey, or else the facility disposes of sharps waste by open burning in a protected area, dumping without burning in a protected area, or removing offsite with storage in a protected area prior to removal offsite.

<sup>4</sup> The process of infectious waste disposal is incineration and the facility has a functioning incinerator with fuel on the day of survey, or else the facility disposes of infectious waste by means of open burning in a protected area, dumping without burning in a protected area, or removal offsite with storage in a protected area prior to removal offsite.

<sup>5</sup> Sharps container observed in general outpatient service area.

<sup>6</sup> Waste receptacles observed in general outpatient service area.

<sup>7</sup> Chlorine-based or other country-specific disinfectants used for environmental disinfection available in the general outpatient area.

<sup>8</sup> Single-use standard disposable syringes with needles or else auto-disable syringes with needles available in the general outpatient area <sup>9</sup> Piped water, water in bucket with specially fitted tap, or water in pour pitcher available in the general outpatient area.

<sup>10</sup> Non-latex equivalent gloves are acceptable.

<sup>11</sup> Any guideline for infection control in health facilities available in the general outpatient area.

Figure 3.8 shows the proportions of health facilities that have the following 9 of 18 items for infection control available:

- Sterilization equipment.
- Safe disposal of sharps.
- Sharps box.
- Disinfectant.
- Syringes and needles.
- Soap/hand disinfectant.
- Latex gloves.

- Medical masks.
- Guidelines for standard precaution.

Table 3.5 and Figure 3.8 show that only 15 percent (36 percent excluding CCs) of facilities have basic sterilization equipment for processing instruments for reuse. Such equipment includes:

- Functioning electric dry heat sterilizer.
- Functioning electric autoclave.
- Non-electric autoclave with a functioning heat source.

As can be seen in Table 3.5, sterilization equipment is most often available at private hospitals (86 percent), NGO facilities (77 percent), and district and upazila public facilities (73 percent). Generally, CCs do not have provision for sterilization equipment so it is not unexpected that only 4 percent of CCs reported having such equipment.

Slightly more than eight in ten (78 percent excluding CCs) of facilities can safely dispose of sharps waste, either by incinerating or burning the waste, dumping it in a protected area, or storing it in a protected container for later removal. Containers for storage of sharps waste prior to disposal (sharps boxes) were observed in the general outpatient service area in 63 percent (56 percent, excluding CCs) of facilities.

Syringes and needles appropriate for safely administering injections are available in eight out of ten facilities.

Disinfectants are available in 56 percent (64 percent excluding CCs) of facilities. Union level public facilities and CCs are less likely than other types of facilities to have disinfectant.

Overall, about half (71 percent excluding CCs) of facilities have soap and running water or else alcohol-based hand disinfectant. Table 3.5 shows that district hospitals (DHs), MCWCs, UHCs, NGOs, and private hospitals are more likely to have soap and running water or alcohol-based hand disinfectant than union level facilities and CCs.

Medical masks are available in only a quarter of all facilities (42 percent excluding CCs). Table 3.5 shows that comparatively few union level facilities (30 percent) and CCs (18 percent) have medical masks.

About one in five facilities (24 percent excluding CCs) have guidelines for standard precautions for infection control available in the general outpatient area.

As Figure 3.8 shows, only 3 percent (7 percent excluding CCs) of facilities have all nine items for infection control.



Figure 3.8 Availability of items for infection control in health facilities

Figure 3.9 presents information on an additional summary measure, the availability of at least seven items for infection control (out of the nine items shown in Figure 3.8) by facility type. A majority of district and upazila facilities (57 percent), NGO facilities (68 percent), and private hospitals (58 percent) have at least seven items for infection control. Considerably smaller proportions of union level facilities (19 percent) and CCs (14 percent) have at least seven items.

Overall, one-fifth of all facilities (32 percent excluding CCs) have at least seven items for infection control. The low proportion of facilities with at least seven items is due primarily to the limited availability of sterilization equipment, medical masks, and guidelines for standard precautions in union level facilities and CCs.

# *Figure 3.9* Availability of at least seven items for infection control in health facilities, by facility type



## Capacity for Adherence to Standards for Quality Sterilization or High-Level Disinfection Process

For most equipment used for client examination, either sterilization or high-level disinfection (HLD), procedures are sufficient to prevent the spread of infection. However, to effectively kill the spores that cause illnesses such as tetanus, either dry-heat sterilization or an autoclave system is required. This type of treatment is necessary for processing surgical equipment for reuse, such as blade handles and scissors used to cut umbilical cords. The standard equipment necessary to process these types of instruments for reuse includes:

- Functioning electric dry heat sterilizer.
- Functioning electric autoclave.
- Non-electric autoclave with a functioning heat source.
- Electric boiler or steamer.
- Non-electric boiler or steamer with a functioning heat source.

Depending on the size of the facility, equipment may be processed with different methods or at more than one site within the facility. The information presented in this chapter refers to the primary site in the facility where equipment is processed.

Table 3.6 and Figure 3.10 report on health facility capacity to process instruments for reuse including the availability of sterilization equipment, an automatic timer, and knowledge of the correct processing time. In general, 37 percent (56 percent excluding CCs) of facilities have the functioning equipment or items necessary to perform an accepted method of equipment processing. Twenty eight percent (45 percent excluding CCs) of facilities have both functioning equipment and correct knowledge of processing time for the processing method. Only 9 percent (21 percent excluding CCs) of facilities have the equipment, knowledge of processing time, and an automatic timer. Less than one-fifth of facilities (22 percent excluding CCs) had written guidelines for sterilization or HLD.

Generally, NGO facilities perform best, while government facilities generally perform the poorest, in terms of the availability of the items necessary for processing equipment for reuse. Facilities in the Rangpur division scored markedly higher than facilities in the other six divisions.

### Table 3.6 Capacity for processing of equipment for reuse

Percentage of facilities with the equipment and other items to support the final processing of instruments for reuse, by background characteristics, Bangladesh HFS 2014

		Percentage of	facilities having:		
	Equipment <sup>1</sup>	Equipment and knowledge of process time <sup>2</sup>	Equipment, knowledge of process time, and automatic timer <sup>3</sup>	Written guidelines for sterilization or HLD <sup>4</sup>	Number of facilities
Facility type					
District and upazila public facilities DH MCWC	<b>87.1</b> 95.2 83.7	<b>72.0</b> 88.7 75.0	<b>37.0</b> 71.0 38.0	<b>30.6</b> 37.1 31.5	<b>47</b> 5 8
UHC	86.7	68.8	31.8	29.4	35
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>42.1</b> 47.6 44.4 31.9	<b>32.5</b> 36.6 36.6 22.6	<b>8.1</b> 7.7 10.3 6.2	<b>16.1</b> 20.1 11.8 15.3	<b>374</b> 149 117 108
Public community clinic (CC)	26.0	18.6	2.9	14.0	1,010
NGO clinic/hospital	86.7	75.4	53.4	49.4	81
Private hospital	91.5	75.5	54.5	13.9	36
<b>Location</b> Urban Rural	89.4 31.6	75.2 23.6	49.8 5.3	37.0 15.0	130 1,418
Division	51.0	23.0	0.0	13.0	1,410
Barisal Chittagong Dhaka Khulna	31.5 39.3 31.1 33.1	24.2 29.2 21.8 26.1	6.5 8.4 9.8 4.0	7.4 10.4 12.5 15.4	116 287 421 197
Rajshahi Rangpur Sylhet	33.2 53.0 36.8	30.3 38.3 31.8	8.0 18.3 3.9	16.6 44.1 12.0	224 205 97
Total	36.5	27.9	9.1	16.9	1,548
Total excluding CCs	56.1	45.3	20.5	22.3	538

<sup>1</sup> Facility reports that some equipment is processed in the facility and facility has a functioning electric dry heat sterilizer, a functioning electric autoclave, a non-electric autoclave with a functioning heat source, an electric boiler or steamer, or a non-electric boiler or steamer with a functioning heat source available anywhere in the facility or high level disinfectant used for sterilization or high level disinfection of equipment for reuse.

<sup>2</sup> Processing area has functioning equipment and power source for processing method and the responsible worker reports the correct processing time (or equipment automatically sets the time) and processing temperature (if applicable) for at least one method. Definitions for capacity for each method assessed were a functioning equipment and the following processing conditions:

• Dry heat sterilization: Temperature at 160°C - 169°C and processed for at least 120 minutes, or temperature at least 170°C and processed for at least 60 minutes.

Autoclave: Wrapped items processed for at least 30 minutes, unwrapped items processed for at least 20 minutes.

· Boiling or steaming: Items processed for at least 20 minutes.

Chemical high-level disinfection: Items processed in chlorine-based or glutaraldehyde or CIDEX or formaldehyde solution and soaked for at least 20 minutes.

<sup>3</sup> An automatic timer here refers to a passive timer that can be set to indicate when a specified time has passed. It may be part of the sterilization process or the HLD equipment.
 <sup>4</sup> Hand-written instructions that are pasted on walls and which clearly outline the procedures to follow for processing of equipment are

<sup>4</sup> Hand-written instructions that are pasted on walls and which clearly outline the procedures to follow for processing of equipment are acceptable.



## Figure 3.10 Capacity to process instruments for reuse

## **Diagnostic Capacity**

Provision of diagnostic services that include laboratory tests and diagnostic imaging is essential for clinical decision making and enhancing delivery of quality health care. In fact, case management for conditions such as TB depend entirely on laboratory and/or imaging results. Tables 3.7.1 and 3.7.2 and Figures 3.11 through 3.14 present information on diagnostic capacity in Bangladesh health facilities. The items included in the tables and figures are based on the methodology proposed by the WHO and USAID for measuring diagnostic capacity as a component for assessing general service preparedness (WHO 2012).

In reviewing the information on diagnostic capacity in Table 3.7.1, it is important to remember that Bangladesh facilities offer various types of diagnostic testing. For example, CCs can offer only blood glucose, urine protein, and urine glucose tests. The UHFWCs/MCWCs generally offer hemoglobin, blood glucose, urine protein, urine glucose, and urine pregnancy testing although some UHFWCs and MCWCs may not perform urine pregnancy tests. Advanced laboratory diagnostics tests and equipment for diagnostic imaging are available only in district level hospitals, UHCs, NGO facilities, and private hospitals.

As Table 3.7.1 shows, private hospitals are generally much more likely to provide basic diagnostic tests than NGO facilities and public facilities. However, DHs are nearly as likely as private hospitals to provide many of the advanced diagnostic tests; for some tests such as TB microscopy, DHs are more likely to have capacity to perform the test than private hospitals.

Figure 3.11 focuses on the capacity of Bangladesh health facilities to conduct five basic diagnostic tests—hemoglobin, blood glucose, urine protein, urine glucose, and urine pregnancy tests. Overall, the capacity to perform these basic tests is limited. For example, only 12 percent (27 percent excluding CCs) of facilities have the capacity to perform a hemoglobin test in the facility.

## Table 3.7.1 Laboratory diagnostic capacity

Among all facilities, the percentages with capacity to conduct basic and advanced laboratory diagnostic tests in the facility, by background characteristics, Bangladesh HFS 2014

Laboratory tests	District and upazila public facilities	DH	MCWC	UHC	Union level public facilities	UHFWC	UHFWC (up- graded)	USC/RD	Public com- munity clinic (CC)	NGO clinic/ hospital	Private hospital	Total	Total excluding CCs
Basic tests													
Hemoglobin	69.7	96.8	28.3	74.9	7.5	10.5	3.6	7.7	3.6	69.2	81.4	11.8	27.2
Blood glucose	24.6	38.7	4.3	26.9	1.4	1.1	1.2	2.1	3.3	47.9	46.4	6.8	13.4
Urine protein	32.0	48.4	3.3	35.8	0.6	0.1	0.2	1.8	0.2	54.1	66.2	5.6	15.8
Urine glucose	31.4	48.4	3.3	35.1	0.7	0.2	0.2	1.8	0.4	49.2	64.0	5.4	14.9
TB microscopy	28.3	38.7	0.0	33.0	0.0	0.0	0.0	0.0	0.0	4.1	23.6	1.6	4.7
Syphilis rapid diagnostic													
test	40.5	79.0	-	42.0	1.3	-	0.0	1.3	0.6	39.5	61.4	5.5	14.5
General microscopy	52.2	75.8	0.0	60.1	0.0	0.0	0.0	0.0	0.0	30.3	66.1	4.7	13.6
Urine pregnancy test	53.8	75.8	-	61.6	0.9	-	0.2	2.4	0.5	58.9	70.1	6.9	18.9
Liver or renal function test		. 0.0		0110			0.2					0.0	1010
(ALT or Creatinine)	11.6	32.3	0.0	11.1	0.0	0.0	0.0	0.0	0.0	13.3	67.9	2.6	7.5
Advanced level diagnostic tests													
Serum electrolytes Full blood count with	22.0	41.9	-	23.5	-	-	-	-	-	24.0	57.5	3.3	9.5
differentials Blood typing and cross	22.0	41.9	-	23.5	-	-	-	-	-	24.0	57.5	3.3	9.5
matching	27.0	51.6	-	28.4	-	-	-	-	-	17.2	45.4	2.8	8.0
CD4 count	2.1	1.6	-	2.6	-	-	-	-	-	1.8	8.6	0.4	1.0
Syphilis serology	7.3	14.5	-	7.8	-	-	-	-	-	8.2	20.8	1.1	3.3
Gram stain	18.4	35.5	-	19.9	-	-	-	-	-	13.6	57.5	2.6	7.5
Stool microscopy	39.6	72.6	-	43.4	-	-	-	-	-	12.1	54.8	3.1	8.9
CSF/body fluid counts	28.8	50.0	-	31.8	-	-	-	-	-	29.0	51.7	3.6	10.3
TB culture	8.4	22.6	-	8.2	-	-	-	-	-	0.7	6.2	0.4	1.3
TB rapid diagnostic test	20.5	37.1	-	22.5	-	-	-	-	-	3.1	18.4	1.2	3.5
Equipment for diagnostic imaging X-ray machine (linked													
with TB)	23.7	67.7	-	22.1	-	-	-	-	-	1.5	51.5	2.0	5.7
X-ray machine	24.2	72.6	-	22.1	-	-	-	-	-	1.5	62.0	2.2	6.5
Ultra-sonogram	10.2	62.9	-	4.4	-	-	-	-	-	15.9	65.8	2.7	7.7
CT scan	1.0	3.2	-	0.9	-	-	-	-	-	0.0	10.2	0.3	0.8
Number of facilities	47	5	8	35	374	149	117	108	1,010	81	36	1,548	538

Note: The basic test indicators presented in this table comprise the diagnostic capacity domain for assessing general service readiness within the health facility assessment methodology proposed by WHO and USAID (WHO 2012). "-" Means facilities do not have the provision to provide the specific laboratory diagnostic tests. Note: CSF = cerebrospinal fluid; CT = computed tomography.

## Figure 3.11 Capacity to conduct basic laboratory diagnostic tests in health facilities



The limited capacity of facilities to perform basic tests is further highlighted in Figure 3.12, which shows the proportion of facilities that can perform all five basic tests by facility type. Only 3 percent (9 percent excluding CCs) of facilities offer all five tests. About one-third of private hospitals and NGO facilities provide the five basic laboratory tests. Among the public facilities, only 16 percent of district and upazila facilities provide all of the basic tests. As expected, since they generally do not have provision to offer the tests, only a negligible proportion of union level facilities and CCs carried out all five basic laboratory tests in the facility.





As discussed earlier, only higher level facilities are equipped to offer diagnostic imaging services. Table 3.7.1 and Figure 3.13 show the availability of a functional x-ray machine in district and upazila level facilities, NGO facilities, and private hospitals. In the public sector, the majority of DHs (73 percent) but only one in five UHCs have functional x-ray machines. Six in ten private hospitals but only a very few (2 percent) NGO facilities have a working x-ray machine.



Figure 3.13 Availability of functional x-ray machine in health facilities, by facility type

The BHFS also obtained information on the availability of functional ultrasound machines at the facilities. As Figure 3.14 shows, over 60 percent of DHs but only 4 percent of UHCs have a functional ultrasound machine. Two-thirds of private hospitals have ultrasound machines, as compared with 16 percent of NGO facilities.



*Figure 3.14* Availability of functional ultrasound machine in health facilities, by facility type

Table 3.7.2 presents the BHFS information on diagnostic capacity by urban-rural location and division. The results show that the proportion of urban facilities that offers basic laboratory tests varies from 15 percent for TB microscopy to 72 percent for hemoglobin, while the availability of basic tests in rural facilities ranges less than one percent for TB and general microscopy to 6 percent for hemoglobin.

One-third or fewer urban health facilities offer any of advanced level tests, and they are virtually unavailable in rural areas. Diagnostic imaging also is generally limited to urban facilities. Looking at the

variation in diagnostic capacity by division, hemoglobin is the most widely available basic test in all the divisions, while CD4 count and TB culture are generally the least available. Five percent or less of health facilities in the divisions have any imaging equipment available.

### Table 3.7.2 Laboratory diagnostic capacity

Among all facilities, the percentages with capacity to conduct basic and advanced laboratory diagnostic tests in the facility, by background characteristics, Bangladesh HFS 2014

	Location		Division							
				Chitta-						
Laboratory tests	Urban	Rural	Barisal	gong	Dhaka	Khulna	Rajshahi	Rangpur	Sylhet	Total
Basic tests										
Hemoglobin	71.7	6.3	7.9	10.8	13.7	5.1	9.3	19.7	13.3	11.8
Blood glucose	39.5	3.8	4.4	4.1	7.1	3.1	5.0	14.9	11.2	6.8
Urine protein	49.6	1.6	3.1	5.8	9.4	3.8	4.3	2.9	3.6	5.6
Urine glucose	47.4	1.6	3.7	6.1	8.5	3.8	3.9	2.8	4.1	5.4
TB microscopy	15.1	0.4	1.2	1.2	2.9	1.7	1.0	0.8	0.6	1.6
Syphilis rapid diagnostic test	45.2	1.8	1.5	5.3	8.3	3.1	3.9	6.5	4.7	5.5
General microscopy	46.8	0.8	2.8	4.5	8.1	3.5	3.7	2.7	2.0	4.7
Urine pregnancy test	58.8	2.2	5.0	7.0	10.7	4.8	5.4	3.6	7.5	6.9
Liver or renal function test										
(ALT or Creatinine)	26.7	0.4	0.8	3.4	4.2	0.9	1.3	2.1	3.3	2.6
Advanced level diagnostic tests										
Serum electrolytes	33.9	0.5	1.5	3.1	5.1	2.4	2.3	2.6	4.0	3.3
Full blood count with	55.5	0.5	1.5	5.1	5.1	2.4	2.0	2.0	4.0	5.5
differentials	33.9	0.5	1.5	3.1	5.1	2.4	2.3	2.6	4.0	3.3
Blood typing and cross	00.0	0.0	1.0	0.1	0.1	2.4	2.0	2.0	4.0	0.0
matching	27.4	0.5	1.0	1.9	4.9	1.3	2.2	2.9	2.2	2.8
CD4 count	2.8	0.0	0.3	0.1	0.6	0.3	0.1	0.7	0.0	0.4
Syphilis serology	12.0	0.1	0.3	1.4	1.5	1.2	0.5	0.6	2.4	1.1
Gram stain	26.1	0.4	0.9	3.9	3.8	2.4	1.3	1.4	1.6	2.6
Stool microscopy	33.1	0.4	2.2	3.1	5.3	2.4	3.0	1.1	0.9	3.1
CSF/ body fluid counts	34.5	0.4	0.8	2.6	6.0	3.2	2.4	3.4	3.2	3.6
TB culture	4.2	0.0	0.0	0.4	0.6	0.7	0.0	0.6	0.2	0.4
TB rapid diagnostic test	11.3	0.1	1.3	1.3	1.5	1.2	0.6	1.5	0.2	1.2
Equipment for diagnostic										
imaging										
X-ray machine (linked with							4.0	o =	4.0	
ТВ)	22.0	0.1	0.9	2.1	3.3	2.3	1.0	0.5	1.8	2.0
X-ray machine	25.1	0.1	0.9	2.6	3.6	2.5	1.2	0.5	2.3	2.2
Ultra-sonogram	29.6	0.2	0.5	2.6	4.8	2.5	1.9	0.8	2.3	2.7
CT scan	2.9	0.0	0.0	0.4	0.4	0.2	0.0	0.1	0.6	0.3
Number of facilities	130	1,418	116	287	421	197	224	205	97	1,548

Note: The basic test indicators presented in this table comprise the diagnostic capacity domain for assessing general service readiness within the health facility assessment methodology proposed by WHO and USAID (WHO 2012). Note: CSF = cerebrospinal fluid; CT = computed tomography.

# Availability of Essential Medicines

Consistent availability of essential medicines is critical to the delivery of quality health services. The 2014 BHFS assessed the availability of 14 essential medicines, in concurrence with the service readiness indicators proposed by the WHO and USAID (WHO 2012). Table 3.8.1 presents information on the availability of these medicines in Bangladesh health facilities.

On average, amoxicillin tablets/capsules were the most widely available of these essential medicines, which were found in 87 percent (88 percent excluding CCs) of facilities on the day of the survey. District and upazila public facilities (95 percent) were more likely than NGO facilities (76 percent) and private hospitals (62 percent) to have amoxicillin tablets/capsules. Paracetamol oral suspension was the next most widely available of the essential medicines, available in 86 percent (83 percent excluding CCs) of facilities. Public facilities (district and upazila facilities, union level facilities, and CCs), each at over 80 percent, were slightly more likely than either NGO facilities (78 percent) or private hospitals (71 percent) to have paracetamol oral suspension.

Other medicines were much less widely available. Availability was particularly limited for amitriptyline tablets, atenolol tablets, captopril tablets, ceftriaxone injections, glibenclamide tablets,

salbutamol inhaler, and simvastatin tablets. These medicines were available, on average, in 6 percent or less of facilities. The limited availability of these medicines reflects the fact that they are generally provided only at higher level facilities and are not expected to be available in lower level facilities. For example, while overall only 5 percent (14 percent excluding CCs) of facilities had atenolol tablets, 73 percent of DHs, 55 percent of UHCs, and 60 percent of private hospitals had the medication available on the day of the survey.

### Table 3.8.1 Availability of essential medicines

Percentages of facilities having the 14 essential medicines available, by background characteristics, Bangladesh HFS 2014

Essential medicines	District and upazila public facilities	DH	MCWC	UHC	Union level public facilities	UHFWC	UHFWC (up- graded)	USC/RD	Public com- munity clinic (CC)	NGO clinic/ hospital	Private hospital	Total	Total ex- cluding CCs
Amitriptyline tablets/ capsules <sup>1</sup>	9.6	19.4	3.3	9.6	0.3	0.1	0.2	0.7	0.0	8.2	53.1	2.0	5.8
Amoxicillin tablets/ capsules <sup>2</sup> Atenolol tablets/	95.1	95.2	94.6	95.2	91.4	94.3	93.7	84.9	86.4	76.2	61.6	86.8	87.5
capsules <sup>3</sup> Captopril tablets/	48.8	72.6	5.4	54.8	3.4	3.7	0.5	6.2	0.7	23.1	59.6	5.4	14.1
capsules <sup>4</sup>	9.2	12.9	1.1	10.5	0.6	0.6	1.1	0.0	0.3	5.5	29.6	1.6	4.0
Ceftriaxone injectable <sup>5</sup> Ciprofloxacin tablets/	56.7	67.7	22.8	62.4	2.0	3.6	1.2	0.9	0.4	36.0	73.2	6.1	16.7
capsules <sup>6</sup> Cotrimoxazole oral	83.7	87.1	80.4	83.9	66.1	70.2	70.8	55.2	14.3	69.4	71.5	33.1	68.5
suspension <sup>7</sup> Diazepam tablets/	73.1	75.8	76.1	72.1	71.3	73.5	78.1	60.9	34.1	43.6	33.3	44.7	64.8
capsules <sup>8</sup> Diclofenac tablets/	77.3	85.5	85.9	74.2	58.5	69.0	72.1	29.0	16.4	61.7	76.9	32.2	61.8
capsules9 Glibenclamide tablets/	60.8	79.0	31.5	64.5	18.4	15.4	12.1	29.5	6.3	59.2	65.9	15.0	31.5
capsules <sup>10</sup> Omeprazole/Cimetidine	17.8	27.4	3.3	19.6	0.7	0.9	0.0	1.2	0.0	2.7	32.2	1.6	4.6
tablets/capsules <sup>11</sup> Paracetamol oral	66.1	83.9	23.9	72.7	18.1	12.6	7.7	37.1	2.0	78.1	69.5	13.4	34.8
suspension <sup>12</sup> Salbutamol inhaler <sup>13</sup> Simvastatin/Atovastatin	82.7 20.5	91.9 38.7	91.3 15.2	79.5 19.0	86.0 4.5	91.3 4.2	90.8 5.3	73.3 3.9	86.6 2.9	77.7 18.4	70.5 53.5	85.5 5.8	83.4 11.2
tablet/capsule <sup>14</sup>	4.0	8.1	3.3	3.5	0.8	0.2	1.5	0.8	0.4	1.6	25.3	1.2	2.8
Number of facilities	47	5	8	35	374	149	117	108	1,010	81	36	1,548	538

Note: The indicators presented in this table comprise the essential medicines domain for assessing general service readiness within the health facility assessment methodology proposed by WHO and USAID (WHO 2012).

<sup>1</sup> For the management of depression in adults.

<sup>2</sup> First-line antibiotics for adults.

<sup>3</sup> Beta-blocker for management of angina/hypertension.

<sup>4</sup> Vasodilator for management of hypertension.

<sup>5</sup> Second-line injectable antibiotic.

<sup>6</sup> Second-line oral antibiotic.
 <sup>7</sup> Oral antibiotic for children.

<sup>8</sup> Muscle relaxant for management of anxiety, seizures.

9 Oral analgesic.

<sup>10</sup> For management of type 2 diabetes.

<sup>11</sup> Proton pump inhibitor, for the treatment of peptic ulcer disease, dyspepsia, and gastro-esophageal reflux disease.

<sup>12</sup> Fever-reduction and analgesic for children.

<sup>13</sup> For the management and relief of bronchospasm in conditions such as asthma and chronic obstructive pulmonary disease.

<sup>14</sup> For the control of elevated cholesterol.

Table 3.8.2 shows that the urban-rural gap in the availability of medicines other than amoxicillin tablets/capsules and paracetamol suspension is often considerable, e.g., more than 40 percent in the case essential medicines like ceftriaxone injection, ciprofloxacin tablets/capsules, diazepam tablets/capsules, diclofenac tablets/capsules, and omeprezole tablets/capsules. Looking at differences by division, amoxicillin tablets/capsules and paracetamol oral suspension are the most widely available medicines, with above 75 percent in all divisions. On the other hand, medicines like captopril tablets/capsules, glibenclamide tablets/capsules, and simvastatin tablets/capsules (for management of hypertension, type 2 diabetes and elevated cholesterol respectively) are much less frequently available in all divisions.

## Table 3.8.2 Availability of essential medicines

Percentages of facilities having the 14 essential medicines available, by background characteristics, Bangladesh HFS 2014

	Loc	ation				Division				
Essential medicines	Urban	Rural	Barisal	Chittagong	Dhaka	Khulna	Rajshahi	Rangpur	Sylhet	Total
Amitriptyline tablets/										
capsules <sup>1</sup>	21.4	0.2	0.9	1.9	3.4	1.2	1.2	2.3	0.8	2.0
Amoxicillin tablets/										
capsules <sup>2</sup>	76.5	87.7	92.7	83.6	77.5	87.9	92.4	97.7	91.6	86.8
Atenolol tablets/										
capsules <sup>3</sup>	38.9	2.3	9.5	4.5	7.6	3.5	5.0	2.7	3.5	5.4
Captopril tablets/										
capsules <sup>4</sup>	14.1	0.5	0.8	1.0	2.7	3.5	0.0	1.2	0.6	1.6
Ceftriaxone injectable <sup>5</sup>	50.1	2.0	4.7	6.1	8.9	4.7	5.5	3.1	5.8	6.1
Ciprofloxacin tablets/										
capsules <sup>6</sup>	75.3	29.3	35.3	33.8	35.6	35.2	31.9	25.8	31.8	33.1
Cotrimoxazole oral										
suspension <sup>7</sup>	47.2	44.5	51.0	45.0	46.9	34.8	37.2	52.6	48.2	44.7
Diazepam tablets/										
capsules <sup>8</sup>	69.4	28.8	31.9	37.2	28.4	37.7	21.6	37.0	37.3	32.2
Diclofenac tablets/										
capsules <sup>9</sup>	59.4	11.0	12.2	19.7	16.6	6.1	15.2	18.1	9.1	15.0
Glibenclamide tablets/										
capsules <sup>10</sup>	14.0	0.5	1.0	1.9	3.1	0.9	0.6	0.7	0.8	1.6
Omeprazole/Cimetidine										
tablets/capsules11	70.0	8.2	10.7	17.2	20.5	8.8	11.0	4.5	7.9	13.4
Paracetamol oral										
suspension <sup>12</sup>	75.4	86.4	89.6	84.2	82.3	86.1	84.6	91.5	86.3	85.5
Salbutamol inhaler <sup>13</sup>	29.9	3.6	6.9	5.5	8.9	8.7	1.4	3.0	2.1	5.8
Simvastatin/Atovastatin										
tablet/capsule14	8.8	0.5	4.6	0.5	1.8	0.6	0.0	1.4	0.6	1.2
Number of facilities	130	1,418	116	287	421	197	224	205	97	1,548

Note: The indicators presented in this table comprise the essential medicines domain for assessing general service readiness within the health facility assessment methodology proposed by WHO and USAID (WHO 2012).

<sup>1</sup> For the management of depression in adults. <sup>2</sup> First-line antibiotics for adults.

<sup>3</sup> Beta-blocker for management of angina/hypertension.

<sup>4</sup> Vasodilator, for management of hypertension.

5 Second-line injectable antibiotic.

<sup>6</sup> Second-line oral antibiotic. 7 Oral antibiotic for children.

<sup>8</sup> Muscle relaxant for management of anxiety, seizures. 9 Oral analgesic.

<sup>10</sup> For management of type 2 diabetes.

<sup>11</sup> Proton pump inhibitor, for the treatment of peptic ulcer disease, dyspepsia, and gastro-esophageal reflux disease.

<sup>12</sup> Fever-reduction and analgesic for children.

<sup>13</sup> For the management and relief of bronchospasm in conditions such as asthma and chronic obstructive pulmonary disease.

<sup>14</sup> For the control of elevated cholesterol.

As another measure of the availability of drugs, the information obtained in the BHFS survey can be used to assess the availability of eight essential medicines included in the drug and dietary supply (DDS) kit. A DDS kit is a box of pre-selected essential drugs and dietary items to be dispensed by the community service providers at union health and FWCs (UHFWCs) for patient management. They receive DDS kits at different intervals from the central warehouse with the following:

- Amoxicillin tablets/capsules.
- Amoxicillin syrup.
- Paracetamol tablets. •
- Paracetamol syrup. ٠
- Tetracycline/chloramphenicol eye ointment. •
- Cotrimoxazole.
- Iron tablets.
- Vitamin A capsules.

Figure 3.15 shows that paracetamol tablets were the most widely available of the medicines in the DDS kit, followed by amoxicillin tablets/capsules and paracetamol syrup. There is little difference in availability of these medicines after CCs are excluded. Tetracycline/Chloramphenicol eye ointment was found in 59 percent (74 percent excluding CCs) of facilities. Vitamin A capsules were available in 64 percent (38 percent excluding CCs) of facilities.



## *Figure 3.15* Availability of eight essential medicines of a DDS kit in health facilities

Figure 3.16 shows the availability of at least six out of the eight essential medicines in the DDS kit. More than three quarters of health facilities (70 percent excluding CCs) have at least six of the medicines in the DDS kit. Among the public facilities, CCs (81 percent) are more likely to have at least six of the medicines than district and upazila (74 percent) and union level (73 percent) facilities. About six in ten NGO facilities have at least six of the medicines compared with four out of ten private hospitals.

# *Figure 3.16* Availability of at least six essential medicines of a DDS kit in health facilities, by facility type



Note: At least six of eight essential medicines of a DDS kit: Amoxicillin tablets/capsules, Amoxicillin syrup, Cotrimoxazole suspension/tablets, Paracetamol tablet, Paracetamol syrup, Tetracycline/Chloramphenicol eye ointment, Iron tablets, and vitamin A capsules. BHFS 2014

# 3.3 BASIC MANAGEMENT SYSTEMS TO SUPPORT AND MAINTAIN QUALITY SERVICES AND APPROPRIATE CLIENT UTILIZATION

Basic management and administrative systems are necessary to ensure that health services are provided consistently at an acceptable level of quality. The 2014 BHFS elicited information on:

- Supportive management practices for providers.
- Quality assurance.
- Client feedback.

## 3.3.1 Supportive Management Practices for Providers

Health facilities are considered to have supportive management practices if the facility had external supervision during the six months before the BHFS and if the staff received routine training and personal supervision. Table 3.9 presents information from the BHFS on supportive management practices.

## External Supervision

Supervision by external managers has many benefits. It can help ensure that system-wide standards and protocols are followed at the facility level and promote an organizational culture that expects standards and protocols to be followed. External supervision provides an opportunity to expose staff members to a wider scope of ideas and relevant experiences, and it can also motivate service providers, especially if the supervisor is supportive.

Overall, nine of every ten health facilities (87 percent excluding CCs) reported that they received external supervision in the six months preceding the BHFS (Table 3.9). Recent supervision is common across all types of facilities, ranging from 63 percent of private hospitals to 94 percent of NGO facilities. Facilities in rural areas (90 percent) are slightly more likely than facilities in urban areas (86 percent) to have external supervision.

## Staff Training

Staff training is essential for updating health workers with knowledge, skills, and technical competence to improve the quality of health care services. The 2014 BHFS assessed whether health care providers had received any formal or structured in-service training related to the services they offer in the 24 months preceding the assessment. If more than half of providers had received such training, a health facility is deemed to have routine staff training.

Overall, 77 percent (66 percent excluding CCs) of facilities have routine staff training (Table 3.9). Private hospitals (43 percent) are less likely than other facility types to have routine staff training. Routine staff training is much more common in rural facilities (82 percent) than urban facilities (56 percent). The proportion of facilities with routine staff training varies considerably by division, from 63 percent in Rangpur division to 86 percent in Dhaka.

## Personal Supervision of Health Service Providers

While facility-level supervision is critical to support quality health service provision throughout the health care system, personal supervision is essential to assess the work of individual staff members. Personal supervision identifies each employee's strengths and weaknesses and provides appropriate support. The 2014 BHFS defined a health facility as having personal supervision of health care providers if at least half of the health service providers reported being personally supervised at least once during the six months preceding the assessment. Almost all facilities (97 percent) have routine staff supervision (Table 3.9).

#### Table 3.9 Supportive management practices at the facility level

Among all facilities, the percentages that had an external supervisory visit during the six months before the survey, and the percentages of facilities where at least half of the interviewed providers reported receiving routine work-related training and personal supervision recently, by background characteristics, Bangladesh HFS 2014

	Percentage of		De	Number of facilities where at least two eligible				
Background characteristics	facilities with supervisory visit during the six months before the survey <sup>1</sup>	Number of facilities	Staff training <sup>2</sup>	Personal supervision <sup>3</sup>	Training and personal supervision	Percentage of facilities with supportive management practices <sup>4</sup>	providers were interviewed with health worker interview questionnaire <sup>5</sup>	
Facility type								
District and upazila public facilities DH MCWC UHC	<b>92.6</b> 91.9 90.2 93.2	<b>47</b> 5 8 35	<b>60.4</b> 58.1 67.5 59.4	<b>98.5</b> 96.8 98.8 98.7	<b>54.5</b> 51.6 65.0 52.9	<b>51.9</b> 48.4 62.5 50.4	<b>46</b> 5 7 34	
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>87.4</b> 86.2 90.9 85.3	<b>374</b> 149 117 108	<b>74.7</b> 74.7 82.4 65.4	<b>94.0</b> 93.5 99.0 88.5	<b>67.3</b> 64.8 78.7 57.7	<b>62.9</b> 62.4 71.9 52.6	<b>178</b> 79 55 44	
Public community clinic (CC)	90.7	1,010	87.5	99.4	86.9	83.2	325	
NGO clinic/hospital	93.7	81	57.0	97.7	54.5	51.8	58	
Private hospital	63.1	36	43.0	88.0	38.8	20.9	31	
<b>Location</b> Urban Rural	85.7 89.9	130 1,418	55.6 81.6	94.6 97.7	50.9 78.6	43.5 74.9	110 527	
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	87.5 88.4 88.7 87.2 91.6 93.0 91.3	116 287 421 197 224 205 97	78.4 68.1 85.7 76.3 72.2 63.1 82.1	95.8 97.1 96.9 98.0 97.9 97.3 96.7	72.7 66.5 81.0 74.1 70.1 63.1 76.8	65.4 62.0 78.2 69.3 63.0 61.9 67.9	44 134 228 84 59 49 39	
Total	89.5	1,548	77.1	97.1	73.8	69.4	638	
Total excluding CCs	87.2	538	66.2	94.7	60.3	55.1	313	

<sup>1</sup> Facility reports that it received at least one external supervisory visit from the district, regional or national office during the six months before the survey.

<sup>2</sup> At least half of all interviewed providers reported that they had received any in-service training as part of their work in the facility during the 24 months before the survey. This refers to structured sessions; it does not include individual instructions that a provider might receive during routine supervision.
<sup>3</sup> At least half of all interviewed providers reported that they had been personally supervised at least once during the six months before the survey.

<sup>3</sup> At least half of all interviewed providers reported that they had been personally supervised at least once during the six months before the survey. Personal supervision refers to any form of technical support or supervision from a facility-based supervisor or from a visiting supervisor. It may include, but is not limited to, review of records and observation of work, with or without any feedback to the health worker.

<sup>4</sup> Facility had an external supervisory visit during the six months before the survey, and staff has received routine training and supervision.

<sup>5</sup> Interviewed providers who did not personally provide any clinical services assessed by the survey; for example, administrators who might have been interviewed, are excluded.

## Training and Personal Supervision

The combination of routine staff training and supervision is crucial to achieving competence and sustaining quality health service delivery. Overall, 74 percent (60 percent excluding CCs) of facilities have both routine staff training and personal supervision of health workers (Table 3.9). The proportion with both routine training and personal supervision exceeds the average only in UHFWCs (upgraded) and CCs. The proportion of facilities with both routine training and personal supervision is 28 percentage points higher in rural facilities (79 percent) than in urban facilities (51 percent). The likelihood that staff have both recently undergone training and been personally supervised varies from 63 percent of facilities in Rangpur division to 81 percent in Dhaka division.

## Supportive Management Practices

Three criteria are used to assess if a facility has supportive management practices. The facility had an external supervisory visit during the six months before the assessment and staff has received both routine training and supervision. Overall, seven of every ten health facilities (55 percent excluding CCs) have all of these supportive management practices (Table 3.9). There is considerable variability in the extent of supportive management practices among the various facility types—from 52 percent of district and upazila public facilities to 83 percent of public community clinics. Supportive management practices are much less common in private health hospitals (21 percent) than in any of the public facilities or in NGO facilities (52 percent).

# 3.3.2 Quality Assurance

Quality assurance (QA) refers to a system for monitoring the quality of care, identifying problems, and instituting changes to resolve those problems. These QA systems require an established standard against which quality is measured. There must be systematic methods to assess results and develop interventions. The following are examples of QA activities and approaches:

- A supervisory checklist for health systems, which documents the presence of equipment and supplies, the completeness of health management information system (HMIS) accounts, and other process indicators.
- A supervisory checklist for health service provision, which varies specific content in client assessments, treatments, or consultations. This list is often used to document the provision of care.
- A facility-wide review of mortality, which is a structured system to review the records of each client who dies. There is usually a committee established for this purpose.
- Audits of medical records or registers, which check medical records for specific items or information and assess adherence to protocols.

Overall, only 10 percent (14 percent excluding CCs) of facilities report that they have regular QA activities and have evidence of such activities (Table 3.10). District and upazila public facilities (46 percent) are more likely than NGO facilities (29 percent) and private hospitals (21 percent) to report QA activities and have supporting documentation. Among the district and upazila facilities, 63 percent of DHs, 47 percent of UHCs, and 32 percent of MCWCs reported QA activities and provided documentation. In contrast, only 6 percent of union level facilities and 8 percent of CCs have documented QA activities.
#### Table 3.10 Quality assurance and client opinion

Among all facilities, the percentages with quality assurance activities and having documentation of quality assurance activities, and the percentages of facilities with a system for eliciting client opinion, by background characteristics, Bangladesh HFS 2014

	Percentage of		
Background characteristics	Regular quality assurance activities with observed documentation of quality assurance activity <sup>1</sup>	System for determining client opinion, procedure for reviewing client opinion <sup>2</sup>	Number of facilities
Facility type			
District and upazila public facilities DH MCWC UHC	<b>46.2</b> 62.9 31.5 46.9	<b>61.3</b> 85.5 45.7 61.2	<b>47</b> 5 8 35
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>5.9</b> 6.3 4.4 7.0	<b>20.0</b> 21.3 23.3 14.6	<b>374</b> 149 117 108
Public community clinic (CC)	7.9	21.6	1,010
NGO clinic/hospital	29.2	81.3	81
Private hospital	20.5	53.1	36
Location Urban Rural	30.9 8.1	69.4 22.3	130 1,418
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	9.2 8.4 9.1 6.6 6.6 20.9 10.8	18.1 19.6 31.5 28.7 21.1 27.4 37.5	116 287 421 197 224 205 97
Total	10.0	26.3	1,548
Total excluding CCs	13.9	35.1	538

<sup>1</sup> Facility reports that it routinely carries out quality assurance activities and had documentation of a recent quality assurance activity. This could be a report or minutes of a quality assurance meeting, a supervisory checklist, a mortality review or an audit of records or registers. <sup>2</sup> Systems asked in the survey for determining client opinion are: suggestion box, client survey form, client interview form, official meeting with community leaders, informal discussion with clients or the community, email, facility's website, letters from clients/community, and text/SMS messages. (Documentation of system not observed.)

#### 3.3.3 Client Feedback

Obtaining client feedback on health service delivery provides an opportunity for management to take remedial actions and to increase the satisfaction of health service users. Feedback is critical to providing health services that meets clients' expectations. The 2014 BHFS assessed if facilities have a system to elicit and review client opinion.

Overall, only 26 percent (35 percent excluding CCs) of facilities have systems to elicit and review client opinion (Table 3.10). The NGO facilities (81 percent), district and upazila facilities (61 percent), and private hospitals (53 percent) are more likely than union level facilities (20 percent) and CCs (22 percent) to have such a system in place. Among district and upazila facilities, 86 percent of DHs, 61 percent of UHCs, and 46 percent of MCWCs have a client feedback system.

#### 3.4 AVAILABILITY OF HUMAN RESOURCES FOR HEALTH

The WHO considers the health workforce to be one of the key building blocks in any health system. As part of its continuing effort to improve health service provision in the public sector, the Government of Bangladesh is also committed to the augmentation of human resources for health.

As part of the assessment of the general preparedness for service delivery, the BHFS collected information on staffing patterns. Table 3.11 and Figures 3.17 through 3.20 show the percentages of sanctioned health care provider posts filled in the surveyed facilities, by provider category and type of facility.

**Physician category:** The BHFS obtained information on filled posts of *physicians* categorized as *Specialist* and *General Practitioner*. Among public facilities, specialists were expected and found only in DHs and UHCs, where 70 percent and 55 percent of specialist posts are filled, respectively. In NGO and private facilities, 85 percent and 71 percent of specialist posts respectively are filled. In the General Practitioner category, 90 percent of the sanctioned posts are filled in private hospitals, 83 percent in NGO facilities, 66 percent in district and upazila public facilities, and 22 percent in union level public facilities (Table 3.11).

The survey also examined the overall status of filled physician posts by combining *Specialist* and *General Practitioner* categories. The percentage of sanctioned physician posts filled is lowest in union level public facilities (22 percent). In contrast, sanctioned physician posts are filled in 62 percent of district and upazila facilities and in over 80 percent of NGO facilities and private hospitals (Table 3.11 and Figure 3.17).

Facility type	Specialist <sup>1</sup>	General prac- titioner <sup>2</sup>	Specialist and general practitioner	Para- medic <sup>3</sup>	Nurse/ midwife <sup>4</sup>	Field super- visors⁵	Medical and pharma- ceutical tech- nicians <sup>6</sup>	Other health care providers <sup>7</sup>	Others <sup>8</sup>	Number of facilities
Facility type										
District and upazila public facilities DH MCWC UHC	<b>58.5</b> 70.1 54.7	<b>66.4</b> 70.5 84.4 64.0	<b>62.2</b> 70.3 84.4 58.8	<b>99.5</b> - 132.3 97.5	<b>80.7</b> 88.8 86.8 75.6	<b>84.7</b> - 84.7	<b>78.8</b> 83.9 74.5 78.0	<b>86.1</b> 71.8 66.7 86.4	<b>78.6</b> 62.9 117.6 81.9	<b>47</b> 5 7 35
Union level public facilities UHFWC UHFWC (upgraded) USC/RD		<b>21.6</b> 16.1 8.0 37.8	<b>21.6</b> 16.1 8.0 37.8	<b>86.9</b> 90.0 80.2 91.2		<b>83.4</b> 97.4 <b>71.4</b>	<b>43.7</b> 36.3 37.0 58.3	<b>93.5</b> 95.4 91.7 91.8	<b>78.7</b> 68.4 89.4 74.2	<b>370</b> 147 117 105
Public community clinic (CC)	-	-	-	-	-	-	-	95.3	86.7	952
NGO clinic/hospital	84.5	82.6	83.7	103.3	83.3	93.4	102.9	102.1	97.0	81
Private hospital	70.8	89.6	81.9	90.0	102.5	100.0	93.8	87.7	92.8	36
Total	67.9	70.7	69.5	92.9	92.2	84.8	72.2	94.8	89.2	1,486
Total excluding CCs	67.9	70.7	69.5	92.9	92.2	84.7	72.2	92.9	89.2	533

Note: Numbers provided by facility in-charge.

"-" Means both sanctioned and filled posts reported none.

<sup>1</sup> Superintendent, Director/Manager/Coordinator, UH&FPO, Consultant (Medicine), Consultant (Surgery), Consultant (OBS/GYN), Consultant (Pediatrics), Consultant (Orthopedic), Consultant (Eye), Consultant (Anesthesia), Consultant (Radiology and Imaging), Consultant (Pathologist), Consultant (ENT), Consultant (Skin & VD), Consultant (Cardiology), Assist. Registrar (Medicine), Assist. Registrar (Surgery), Assist. Registrar (OBS/GYN), Assist. Registrar (Pediatric).

<sup>2</sup> Residential Medical Officer (RMO), Medical Officer (MO)/Physician, Radiologist, Pathologist, Anesthetist, Emergency Medical Officer (EMO), Indoor Medical Officer (IMO), Medical Officer (MO-Blood Transfusion), Dental Surgeon, MO (Homeopath/Unani/Ayurvedic), Medical Officer (MO-Clinic), Medical Officer (MCH-FP).

<sup>3</sup> Senior FWV, SACMO, Family Welfare Visitor (FWV), Paramedic.

<sup>4</sup> Matron, Nursing Supervisor, Senior Staff Nurse, Staff Nurse, Assistant Nurse, Midwife.

<sup>5</sup> Upazila Family Planning Officer (UFPO), Assist FP Officer (AUFPO), Family Planning Inspector (FPI), TB Leprosy Control Administrator, Health Inspectors, Assistant Health Inspectors.

<sup>6</sup> Pharmacist, Medical Technologist (LAB), Medical Technologist (Blood Transfusion), Medical Technologist (Radiology), Medical Technologist (Physiotherapy), Medical Technologist (Dental), EPI Technician.

<sup>7</sup> Nutritionist/ Dietician, Health Educator, Sanitary Inspector, Community Health Care Provider, Health Assistant, Family Welfare Assistant (FWA), Counselor, Community Mobilizer/Service Promoter, Out Reach Worker.

<sup>8</sup> Female Medical Attendant, Ward Master, Attendant (OT/LAB/Dispensary/Ward Boy), Store Keeper, Statistician/Statistical Assistant, Other Providers.

Compared with finding from the 2011 BHFS, physician staffing has improved in DHs and MCWCs, remained same in UHCs, and drastically declined in union-level facilities, particularly at the upgraded UHFWCs (Figure 3.18). Because of the timing of the survey, the 2014 BHFS did not capture any potential

effect that the appointment of 6,000 physicians through the 33rd Bangladesh Civil Service (BCS) might have had on the physician vacancy rate. However, the BHFS data on staffing patterns indicate that HR planning and deployment of physicians for lower level facilities remains an urgent issue that must be addressed.



Figure 3.17 Percentage of physician positions filled, by facility type

*Figure 3.18* Trend in physician positions filled in public health facilities, by facility type



**Nurse/midwife category:** The staffing patterns for nurses are much better than for physicians. Over 100 percent (103 percent) of the sanctioned posts in private hospitals, 83 percent in NGO facilities, and 81 percent in district and upazila public facilities are filled (Table 3.11 and Figure 3.19).

Recent recruitment of more than 4,000 nurses has clearly had a positive effect on filling nurse/midwifes posts in the public sector. However, it is important to note that the sanctioned positions for nurses in Bangladesh are much lower than the level recommended by WHO. Currently, in terms of sanctioned positions in Bangladesh, there are 1.2 nurses for every physician, whereas WHO recommended

a staffing ratio of 4 nurses for every physician. Thus, the sanctioned positions for nurses must be increased in the public sector to ensure quality service provision.



Figure 3.19 Percentage of nurse/midwife positions filled in different facilities

**Paramedic category:** Staffing patterns and distribution of paramedics' positions are more equitable across the sectors. All paramedic positions at district and upazila public facilities as well as in NGO facilities are currently filled, as are 90 percent of paramedic positions in private hospitals. Vacancies in paramedic positions are highest in upgraded UHFWCs, where paramedics (family welfare visitors (FWVs) and sub-assistant community medical officers (SACMOs)) are the main service providers (Table 3.11 and Figure 3.20).

Figure 3.20 Percentage of paramedic positions filled, by facility type



Note: Paramedics include SACMO, FWV, and NGO/private paramedics

BHFS 2014

**Field supervisor category:** All (100 percent) sanctioned field supervisor posts in private hospitals are filled for this category. Eighty percent or more of field supervisor posts are filled in UHCs, UHFWCs, and NGO facilities (Table 3.11).

## Key Findings

- Out-patient curative care for sick children is widely available in Bangladesh health facilities (93 percent of facilities).
- Less than 80 percent of facilities offer vaccination services, and only 62 percent provide growth monitoring, an essential service in Bangladesh where one-third of children under age five are stunted and underweight.
- Seven in ten facilities provide Vitamin A supplementation to children.
- Only about half of facilities that offer child curative care have at least one staff member who had ever received training on integrated management of child illness (IMCI).
- Only half of facilities that offer child curative care had IMCI guidelines and less than one third had growth monitoring guidelines.
- Only 4 in 10 facilities that offer child curative care have all four basic primary care equipment such as scales, measuring boards, thermometer, and stethoscope.
- Among facilities that offer child curative care, more than 8 in 10 have oral rehydration solution, the first-line antibiotic amoxicillin, and drugs for treating intestinal parasites. Other essential drugs such as zinc and cotrimoxazole are less widely available.
- Only one in ten facilities that offer child curative care has hemoglobin diagnostic capacity.
- Nine in ten providers of child health services received recent supervision and one third received recent in-service training (during last 24 months).
- Less than 10 percent of facilities that offer child curative care have all the WHO-recommended drugs and equipment to treat sick children.

# 4.1 BACKGROUND

n estimated 10 million children under five years of age die each year, primarily from preventable causes. It is common for providers to treat a sick child's most evident symptoms without conducting a full assessment of the child's health status or acting to prevent further illness. For this reason, the World Health Organization (WHO) and other agencies developed the Integrated Management of Childhood Illness (IMCI) strategy (CHD 1996-1997 Report). This strategy advocates using every visit to a health care provider as an opportunity, not only to conduct a full assessment of the child's current health and possible underlying problems, but also to provide interventions, such as vaccination, that can prevent illness or minimize its progression.

The IMCI strategy aims to reduce morbidity and mortality among children under five years of age through the following three activities:

- Improving health workers' skills through training and supportive supervision.
- Improving health systems, including equipment, supplies, organization of work, and referral systems.
- Improving child care at the community and household levels in line with key family practices.

The 2014 BHFS used the IMCI guidelines as the basis for assessing the provision of child health services. These guidelines are based on two major principles: (1) that all sick children should be routinely

assessed for *main symptoms* (fever, cough, or difficult breathing; diarrhea; ear pain or discharge); nutrition and immunization status; feeding problems; and other potential problems and (2) that all children should be examined for *general danger signs* that indicate the need for immediate referral or hospital admission.

This chapter explores key issues related to the provision of quality child health services at health facilities:

- Availability of child health services. Section 4.2, including Tables 4.1 through 4.5 and Figures 4.1 through 4.3, examines the availability of child health services and of trained staff, equipment, guidelines, medicines, vaccines, infection control, and laboratory diagnostic capacity necessary to provide those services.
- Service readiness. Section 4.3, including Table 4.6 and Figures 4.4 and 4.5, addresses the overall readiness of facilities to provide quality child health services.
- **Basic management and administrative systems.** Section 4.4, including Tables 4.7 and 4.8, considers two aspects of management and administrative systems that support of quality services: personal supervision and in-service training for providers of child health services.

# 4.2 AVAILABILITY OF CHILD HEALTH SERVICES

# 4.2.1 Provision of Outpatient Curative Care, Child Growth Monitoring, and Child Vaccination Services

The 2014 BHFS assessed the availability of child health services, and more specifically, the availability of curative care services for sick children, child growth monitoring services, and child vaccination services. Table 4.1 and Figure 4.1 provide information on the availability of various types of basic child health services. Outpatient curative care for sick children is widely available in all types of public facilities, from 93 percent of community clinics (CCs) to 97 percent of district and upazila facilities. Curative care services for children are less available in NGO facilities (83 percent) and private hospitals (68 percent).

Child growth monitoring is not as available as curative care services in health facilities in Bangladesh. Only 62 percent (65 percent excluding CCs) of facilities offer the service. Among the facilities that offer child growth monitoring, 84 percent provide the service during all working days in a week (not shown in table). Within the variation in the availability of growth monitoring services by facility type, the majority of (55 to 78 percent) of public and NGO facilities offer growth monitoring service for children, as compared with only two in ten private hospitals. Urban facilities (55 percent) are less likely to offer the service than rural facilities (63 percent); this is probably because of the high density of private facilities in urban areas.

Almost all district and upazila level public facilities offer child vaccination services although maternal and child welfare centers (MCWCs) are less likely to offer vaccination services. Eighty-six percent of CCs offer vaccination services, although these services are less likely to be available in union level public facilities (62 to 66 percent). However, vaccination services are available through an outreach program at union and community level public facilities during immunization days with the help of Expanded Program on Immunization (EPI) personnel. Seven in ten NGO facilities offer vaccination services. A few private facilities (16 percent) are providing immunization services.

Child health services are not well integrated, with only one-half (47 percent excluding CCs) of facilities that provide all three basic child services. Among the various managing authorities, public sector facilities (from 35 percent of union sub-centers/rural dispensaries (USCs/RDs) to 78 percent of upazila health complexes (UHCs) and NGO facilities (51 percent) are much more likely to provide all three basic child health services than private hospitals (9 percent).

#### Table 4.1 Availability of child health services

Among all facilities, the percentages that offer specific child health services at the facility, by background characteristics, Bangladesh HFS 2014

		Perce	ntage of facilities th	at offer:			
Background characteristics	Outpatient curative care for sick children	Growth monitoring	Child vaccination <sup>1</sup>	All three basic child health services	Routine Vitamin A supplementation	Number o facilities	
Facility type							
District and upazila public							
facilities	96.6	76.9	93.7	72.0	76.0	47	
DH	100.0	74.2	91.9	69.4	88.7	5	
MCWC	93.5	73.9	66.3	46.7	52.2	8	
UHC	96.7	78.0	100.0	78.0	79.3	35	
Union level public facilities	96.1	66.3	64.1	46.7	42.2	374	
UHFWC	97.0	70.6	64.7	51.6	44.5	149	
UHFWC (upgraded)	96.6	71.4	65.7	51.0	35.4	117	
USC/RD	94.4	55.0	61.7	35.1	46.3	108	
Public community clinic (CC)	92.7	60.9	85.7	53.9	80.1	1,010	
NGO clinic/hospital	82.9	68.7	71.0	50.9	62.9	81	
Private hospital	68.2	19.5	15.6	9.3	37.3	36	
Location							
Urban	81.6	55.2	63.7	45.1	60.8	130	
Rural	93.6	62.8	79.7	52.1	69.6	1,418	
Division							
Barisal	96.0	60.1	84.7	53.6	69.6	116	
Chittagong	92.1	56.6	76.8	45.2	63.2	287	
Dhaka	90.0	60.7	68.1	45.8	64.7	421	
Khulna	98.6	66.5	82.3	58.7	77.7	197	
Rajshahi	85.0	53.6	82.3	43.2	64.6	224	
Rangpur	95.5	77.3	85.7	69.6	83.7	205	
Sylhet	99.8	65.8	87.2	58.6	64.0	97	
Total	92.6	62.1	78.4	51.5	68.9	1,548	
Total excluding CCs	92.3	64.5	64.6	47.1	47.9	538	





□ Outpatient curative care for sick children ■ Growth monitoring ■ Child vaccination ■ All three services

(N = 1,548)

BHFS 2014

### 4.2.2 Vitamin A Supplementation

The 2014 BHFS assessed the routine provision of Vitamin A supplementation to children less than age one year. Overall, the results indicate that close to 70 percent (48 percent excluding CCs) of health facilities in Bangladesh provide Vitamin A supplementation to children. District and upazila facilities (76 percent) and CCs (80 percent) are more likely to provide Vitamin A supplementation than union level public facilities (42 percent), NGO facilities (63 percent), and private hospitals (37 percent) (Table 4.1).

# 4.2.3 Availability of Guidelines, Trained Staff, and Basic Equipment for Child Curative Care

The availability of treatment guidelines for easy reference contributes to the overall quality of client services. Trained staff and basic equipment are also necessary to assess and examine sick children properly.

Table 4.2 presents information on the availability of relevant guidelines and basic equipment for sick child care at facilities that offer outpatient curative care for children. Overall, 51 percent (56 percent excluding CCs) of facilities have IMCI guidelines. Guidelines for growth monitoring are available in fewer facilities. Only 3 out of 10 facilities (32 percent excluding CCs) have growth monitoring guidelines. The availability of guidelines varies markedly by facility type. District and upazila public facilities (77 percent), NGO facilities (57 percent), and union level public facilities (55 percent) are more likely to have IMCI guidelines than private hospitals (26 percent). The NGO facilities (47 percent) and district and upazila public facilities (29 percent) and private hospitals (8 percent) to have guidelines on growth monitoring. A timer is more likely to be available in majority of the facilities while an infant scale and growth chart are less likely to be available.

Table 4.2 and Figure 4.2 show that there also are gaps in the availability of basic equipment for sick childcare. Thermometers and stethoscopes are the most widely available equipment. All NGO facilities, virtually all district and upazila facilities and private hospitals, and more than 9 in 10 CCs that offer outpatient curative care for sick children have both items. Just over 60 percent (71 percent excluding CCs) of facilities that offer sick child care had a child scale, and a similar proportion (54 percent excluding CCs) had a length/height board (Table 4.2). Only 42 percent (44 percent excluding CCs) of facilities that offer curative care for sick children had all four basic items of equipment available on the day of the survey.

#### Table 4.2 Guidelines and equipment for child curative care services

Among facilities that offer outpatient curative care for sick children, the percentages having indicated guidelines and equipment, by background characteristics, Bangladesh HFS 2014

	Gui	delines				Ed	quipment				Number of facilities offering	
Background characteristics	IMCI	Growth monitoring	Child scale <sup>1</sup>	Length or height board	Thermo- meter	Stetho- scope	All four equipment available <sup>2</sup>	Infant scale <sup>3</sup>	Growth chart	Timer	outpatient curative care for sick children	
Facility type												
District and upazila public facilities DH MCWC UHC	<b>77.1</b> 75.8 57.0 81.5	<b>41.9</b> 41.9 40.7 42.1	<b>86.5</b> 98.4 86.0 84.8	<b>68.6</b> 80.6 70.9 66.3	<b>97.7</b> 96.8 95.3 98.3	<b>99.6</b> 100.0 97.7 100.0	<b>66.3</b> 79.0 66.3 64.4	<b>75.1</b> 88.7 76.7 72.7	<b>68.1</b> 58.1 65.1 70.2	<b>92.2</b> 96.8 89.5 92.0	<b>46</b> 5 7 34	
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>54.8</b> 56.4 45.4 63.0	<b>29.2</b> 37.2 24.4 23.1	<b>65.3</b> 64.2 79.5 51.0	<b>48.6</b> 44.6 62.3 39.1	<b>84.3</b> 82.3 83.3 88.1	<b>93.4</b> 93.6 91.1 95.8	<b>36.3</b> 33.5 48.0 27.1	<b>41.0</b> 38.1 53.3 31.2	<b>46.9</b> 50.8 52.8 34.9	<b>76.3</b> 80.1 73.3 74.4	<b>359</b> 144 113 102	
Public community clinic (CC)	47.8	30.0	55.9	66.9	96.8	93.3	40.8	25.3	40.6	70.4	936	
NGO clinic/hospital	56.9	47.3	84.8	73.8	100.0	100.0	66.4	74.9	63.2	91.9	67	
Private hospital	26.4	8.4	89.9	46.4	97.7	97.7	44.1	82.6	24.4	89.7	24	
<b>Location</b> Urban Rural	54.9 50.2	35.9 30.2	86.3 59.2	67.7 61.9	98.2 93.5	99.5 93.5	61.2 40.2	76.2 30.7	53.8 43.0	91.2 72.5	106 1,327	
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	66.5 42.8 38.0 50.9 45.7 77.1 57.9	35.0 27.5 24.8 34.9 25.1 52.4 14.5	62.5 59.1 50.1 61.3 57.6 83.7 70.0	65.7 62.3 54.2 61.8 61.9 72.4 72.1	92.5 94.5 92.3 92.5 94.0 98.5 92.4	90.2 90.1 93.5 98.9 92.9 99.6 90.4	38.2 36.4 31.6 42.8 43.0 64.4 50.0	35.6 32.9 29.9 31.5 29.5 47.5 39.4	51.2 41.9 30.3 48.3 35.5 71.9 44.0	75.4 82.2 68.9 77.8 70.6 75.0 65.4	112 265 379 195 190 196 96	
Total	50.6	30.6	61.2	62.3	93.8	93.9	41.8	34.1	43.8	73.9	1,433	
Total excluding CCs	55.8	31.8	71.1	53.8	88.3	95.1	43.5	50.7	50.0	80.5	497	

<sup>1</sup> A scale with gradation of 250 grams, or a digital standing scale with gradation of 250 grams or less where an adult can hold a child to be weighed. <sup>2</sup> Child scale, length or height board, thermometer, and stethoscope.

<sup>3</sup>A scale with gradation of 100 grams, or a digital standing scale with gradation of 100 grams where an adult can hold an infant to be weighed.

## Figure 4.2 Availability of all four basic items of equipment for outpatient curative care for sick children, by facility type



Note: The facility had the following four items: child scale, length or height board, thermometer, and stethoscope.

The 2014 BHFS obtained information on any in-service training on IMCI and growth monitoring that staff who provide child health services had ever received as well as recent training (defined as training received in the past 24 months). Table 4.3 shows that just over half of all facilities that offer curative care for sick children have at least one provider of child care services who reported ever receiving in-service training on IMCI, and slightly more than 4 in 10 facilities have at least one provider who had ever received in-service training on growth monitoring. Fewer facilities have providers with recent in-service training on IMCI (29 percent) or growth monitoring (27 percent) (Table 4.3). District and upazila facilities are much more likely than other facility types to have providers who have ever been trained in IMCI and growth monitoring.

#### Table 4.3 Trained staff for child curative care services

Among facilities that offer outpatient curative care for sick children, the percentages having indicated trained staff, by background characteristics, Bangladesh HFS 2014

		Train	ed staff		Number of
Background characteristics	IMCI <sup>1</sup> (during the past 24 months)	IMCI <sup>1</sup> (at any time)	Growth monitoring <sup>2</sup> (during the past 24 months)	Growth monitoring <sup>2</sup> (at any time)	facilities offering outpatient curative care for sick children
Facility type					
District and upazila public facilities DH MCWC UHC	<b>37.9</b> 35.5 22.1 41.6	<b>78.2</b> 72.6 67.4 81.3	<b>32.9</b> 27.4 17.4 37.1	<b>66.9</b> 62.9 62.8 68.4	<b>46</b> 5 7 34
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>14.8</b> 10.8 14.9 20.3	<b>53.2</b> 52.2 47.3 61.3	<b>11.8</b> 8.5 13.9 14.1	<b>39.5</b> 38.8 39.0 40.9	<b>359</b> 144 113 102
Public community clinic (CC)	36.3	54.7	33.7	45.6	936
NGO clinic/hospital	10.6	46.4	11.4	44.4	67
Private hospital	18.8	30.4	18.2	27.9	24
<b>Location</b> Urban Rural	20.7 30.1	52.0 54.4	17.9 27.6	45.9 44.3	106 1,327
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	44.1 25.4 34.7 17.5 26.8 27.2 36.4	66.9 48.7 57.0 44.5 54.0 57.0 58.6	31.9 26.0 26.1 26.3 24.6 26.1 34.0	50.7 36.7 46.4 44.6 40.8 46.3 52.8	112 265 379 195 190 196 96
Total	29.4	54.3	26.9	44.4	1,433
Total excluding CCs	16.5	53.5	14.0	42.1	497

<sup>1</sup> At least one provider of child health services in the facility reported receiving in-service training in IMCI. Training refers only to inservice training. The training must have involved structured sessions, and does not include individual instruction a provider might have received during routine supervision.

<sup>2</sup> At least one provider of child health services in the facility reported receiving in-service training in growth monitoring. Training refers only to in-service training. The training must have involved structured sessions, and does not include individual instruction that a provider might have received during routine supervision.

## 4.2.4 Availability of Medicines and Commodities for Sick Child Care

A range of medicines and commodities are needed to provide curative care for sick children. Both WHO and U.S. Agency for International Development (USAID) have proposed a set of essential, priority medicines and commodities that facilities should have available to support the provision of health services (Service Availability and Readiness Assessment (SARA), WHO 2013) for sick children. Overall, essential medicines are in better supply than priority medicines in Bangladesh health facilities that offer curative care for sick children (Table 4.4). A majority of facilities that offer curative care for children had six essential medicines (oral rehydration solution (ORS), amoxicillin syrup, paracetamol syrup/suspension, Vitamin A capsules, mebendazole/albendazole, and zinc tablets) in stock on the day of the survey visit. However, the

availability of the medicines varied markedly by facility type. For example, 8 in 10 public facilities (80 percent on average), had amoxicillin syrup/suspension/dispersible available on the day of the survey visit, as compared with 70 percent of NGO facilities and 54 percent of private hospitals. Among public sector facilities that offer curative care for sick children, MCWCs (92 percent) were most likely and USCs/RDs (69 percent) were least likely to have this essential medicine.

Each of the four priority medicines (ampicillin powder for injection, ceftriaxone powder for injection, gentamycin injection, and benzathine benzyl-penicillin injection) was available on the day of the survey in less than 10 percent of all facilities that offer curative care for sick children. Even in higher level facilities such as hospitals where these priority medicines are expected to be available, the survey findings are not encouraging. For example, only half of private hospitals, a quarter of district hospitals (DHs) (26 percent), and a similar proportion of UHCs (24 percent) had ampicillin powder for injection available on the day of the visit. Ceftriaxone powder for injection was the most widely available priority medicine in higher level facilities. Three quarters of private hospitals, two thirds (68 percent) of DHs, and a slightly smaller proportion of UHCs (62 percent) had this medicine available.

#### Table 4.4 Availability of essential and priority medicines and commodities

Among facilities that offer outpatient curative care services for sick children, the percentages of essential and priority medicines to support care for the sick child observed to be available in the facility on the day of the survey, by background characteristics, Bangladesh HFS 2014

			Esse	ential medi	cines				Priority r	nedicines		
Background characteristics	ORS <sup>1</sup>	Amoxi- cillin syrup, suspen- sion or disper- sible <sup>1</sup>	Co- trimox- azole syrup, suspen- sion or disper- sible	Para- cetamol syrup or suspen- sion <sup>1</sup>	Vitamin A capsules <sup>1</sup>	Meben- dazole/ Alben- dazole	Zinc tablets or syrup	Ampi- cillin powder for injection	Ceftri- axone powder for injection	Genta- mycin injection	Benza- thine benzy- penicillin for injection	Number of facilities offering outpatient curative care for sick children
Facility type												
District and upazila public facilities DH MCWC UHC	<b>87.7</b> 98.4 46.5 94.8	<b>80.4</b> 75.8 91.9 78.6	<b>74.3</b> 75.8 76.7 73.6	<b>82.4</b> 88.7 91.9 79.5	<b>59.5</b> 69.4 40.7 61.9	<b>75.5</b> 83.9 94.2 70.2	<b>65.4</b> 75.8 27.9 71.7	<b>22.0</b> 25.8 8.1 24.3	<b>56.7</b> 67.7 23.3 62.1	<b>39.2</b> 50.0 14.0 42.9	<b>13.2</b> 17.7 8.1 13.6	<b>46</b> 5 7 34
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>47.5</b> 39.4 24.3 84.8	<b>81.7</b> 86.4 87.1 69.1	<b>71.1</b> 73.1 78.4 60.0	<b>84.4</b> 89.8 90.3 69.9	<b>29.0</b> 31.6 27.4 26.9	<b>84.8</b> 91.8 91.7 67.1	<b>33.9</b> 33.1 26.5 43.2	<b>4.5</b> 9.0 0.9 2.1	<b>2.1</b> 3.7 1.2 0.9	<b>1.1</b> 1.3 1.1 0.9	<b>1.5</b> 2.3 0.3 1.7	<b>359</b> 144 113 102
Public community clinic (CC)	89.3	81.6	34.4	86.9	77.7	91.3	77.2	2.6	0.4	0.0	6.9	936
NGO clinic/hospital	89.8	69.8	44.1	81.7	67.6	82.0	70.6	20.7	37.9	17.0	20.6	67
Private hospital	78.3	53.7	32.5	72.0	46.3	71.7	67.7	49.8	76.7	66.8	33.3	24
<b>Location</b> Urban Rural	86.5 77.9	70.4 81.3	49.7 44.9	78.4 86.2	63.1 64.0	78.3 89.2	67.1 65.3	28.4 3.5	50.8 2.1	35.5 0.9	21.6 5.7	106 1,327
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	84.7 72.7 75.4 73.8 85.0 90.5 72.7	85.4 80.0 80.2 78.6 78.8 80.6 85.1	51.9 45.4 46.4 34.5 40.9 52.9 48.0	92.1 87.3 80.7 86.3 82.8 91.4 85.1	67.9 49.6 64.8 62.2 72.5 81.3 45.7	92.2 85.0 84.5 87.3 87.7 96.8 94.9	76.5 53.6 67.8 61.6 66.9 75.6 60.5	1.4 3.0 9.3 6.0 5.3 3.1 4.2	3.9 6.5 7.4 4.7 5.8 3.2 5.6	2.4 4.4 4.9 2.4 1.9 2.8 3.3	3.5 3.4 11.9 2.7 3.5 13.4 2.5	112 265 379 195 190 196 96
Total	78.6	80.5	45.3	85.6	63.9	88.4	65.5	5.3	5.7	3.5	6.9	1,433
Total excluding CCs	58.4	78.6	65.8	83.2	37.9	82.9	43.4	10.5	15.7	10.0	6.7	497

Note: The essential medicines include the medicines and commodities indicators for assessing readiness to provide preventative and curative child health services within the health facility assessment methodology proposed by WHO and USAID (WHO 2012). Note: ORS = oral rehydration solution.

<sup>1</sup> These medicines and commodities are also in the group of priority medicines for children.

#### 4.2.5 Infection Control in Sick Child Services

Infection control is an important concern in most health services and child health services. Infection control requires supplies for hand cleaning, gloves, and the means for disposing of sharps and infectious waste. Just over half (69 percent excluding CCs) of facilities that provide curative care services for sick children had some means for hand cleaning—either both soap and running water or alcohol-based hand disinfectant on the day of the BHFS visit (Table 4.5). District and upazila public facilities, NGO facilities, and private hospitals (86 to 90 percent) were more likely to have some hand-cleaning supplies than union level public facilities (62 percent) or CCs (48 percent). With other infection control items, 62 percent of all facilities (including CCs) had latex gloves, 66 percent (55 percent excluding CCs) had a sharps container, but only 28 percent (34 percent excluding CCs) had a waste receptacle on the day of assessment. Higher level facilities are more likely to have these items than union level facilities and CCs.

#### Table 4.5 Infection control and laboratory diagnostic capacity

Among facilities that offer outpatient curative care services for sick children, the percentages with indicated items for infection control observed to be available at the service site on the day of the survey and the percentages with the indicated laboratory diagnostic capacity in the facility, by background characteristics, Bangladesh HFS 2014

					Items for infe	ection con	itrol				diagi	ratory nostic acity	Number of
Background characteristics	Soap	Running water <sup>1</sup>	Soap and running water	Alcohol- based hand disin- fectant	Soap and running water or else alcohol- based hand disinfectant	Latex gloves <sup>2</sup>	Sharps container	Waste recep- tacle <sup>3</sup>	All 6 items available <sup>4</sup>	At least 4 items available	Hemo- globin⁵	Stool micro- scopy <sup>6</sup>	facilities offering outpatient curative care for sick children
District and upazila													
public facilities	84.4	84.2	81.2	56.4	85.6	66.5	71.3	51.8	31.2	67.5	70.6	39.6	46
DH	85.5	85.5	79.0	59.7	83.9	61.3	66.1	54.8	32.3	64.5	96.8	72.6	5
MCWC	93.0	91.9	89.5	58.1	91.9	73.3	80.2	47.7	33.7	72.1	29.1	-	7
UHC	82.4	82.4	79.7	55.5	84.5	65.9	70.2	52.2	30.5	67.0	75.4	42.9	34
Union level public													
facilities	76.1	56.7	53.1	28.7	62.0	57.5	48.0	24.8	10.1	35.9	7.8	-	359
UHFWC	76.3	57.5	55.9	34.1	63.2	63.0	55.6	29.0	14.7	39.8	10.9	-	144
UHFWC (upgraded)	80.6	62.2	59.2	21.3	67.3	62.9	40.3	20.9	6.1	38.0	3.7	-	113
USC/RD	70.9	49.4	42.4	29.3	54.5	43.6	45.8	23.2	7.9	28.0	8.1	-	102
Public community													
clinic (CC)	76.0	39.3	36.5	30.1	47.9	62.0	71.4	24.4	11.8	36.7	3.8	-	936
NGO clinic/hospital	90.4	90.1	86.8	67.1	89.5	82.7	78.7	62.0	42.0	75.6	69.9	12.9	67
Private hospital	85.2	90.6	85.2	61.3	86.7	68.0	73.4	64.4	38.5	71.9	81.3	53.8	24
Location													
Urban	88.2	89.8	85.1	63.5	87.8	71.2	76.3	62.3	38.7	72.1	71.8	32.9	106
Rural	76.2	45.0	42.1	30.4	52.6	61.3	65.1	25.0	11.9	37.3	6.5	0.4	1,327
Division													
Barisal	83.0	35.9	33.6	32.2	44.3	53.0	72.8	28.1	15.7	30.4	6.9	1.3	112
Chittagong	67.0	35.7	32.6	31.5	53.4	63.5	58.5	18.8	5.4	29.8	10.3	3.2	265
Dhaka	71.7	45.8	40.6	30.2	49.6	63.2	67.8	35.3	11.8	41.9	12.6	4.5	379
Khulna	70.4	51.8	50.6	22.7	52.0	43.3	51.4	25.0	15.5	24.9	4.7	2.2	195
Rajshahi	88.9	51.7	50.5	43.8	56.7	56.3	68.4	18.8	11.9	49.5	9.4	2.9	190
Rangpur	88.8	69.3	65.2	46.3	74.3	83.8	80.2	35.8	33.1	59.1	20.6	1.2	196
Sylhet	86.0	51.3	50.1	19.5	60.2	69.6	66.2	29.7	4.5	43.2	13.1	0.9	96
Total	77.1	48.4	45.2	32.9	55.2	62.1	65.9	27.8	13.8	39.9	11.4	2.8	1,433
Total excluding CCs	79.2	65.4	61.8	38.0	69.1	62.3	55.5	34.3	17.7	46.0	25.6	8.0	497

Note: The laboratory diagnostic capacity indicator measures presented in this table are the indicators in the diagnostics domain for assessing readiness to provide preventative and curative child health services within the health facility assessment methodology proposed by WHO and USAID (WHO 2012). "-" Means facilities do not have provision of stool microscopy test.

<sup>1</sup> Piped water, water in bucket with specially fitted tap, or water in pour pitcher.

<sup>2</sup> Non-latex equivalent gloves are acceptable.

<sup>3</sup> Waste receptacle with plastic bin liner.

<sup>4</sup> Soap, running water, alcohol-based disinfectant, latex gloves, sharps container, and waste receptacle.

<sup>5</sup> Facility had functioning equipment and reagents for colorimeter, hemoglobinometer, or HemoCue.

<sup>6</sup> Facility had a functioning microscope with glass slides and formal saline (for concentration method) or normal saline (for direct method) or Lugol's iodine solution.

Table 4.5 shows that only 14 percent (18 percent excluding CCs) of facilities that offer curative care services for sick children had all six key items for infection control (soap, running water, alcohol-based

disinfectant, latex gloves, sharps container, and waste receptacle). The likelihood that a facility had all six infection control items varied by facility type. In public facilities, 31 percent of district and upazila facilities had all six infection control items compared with 10 percent of union level facilities and 12 percent of CCs (Table 4.5 and Figure 4.3). Private facilities (39 percent) and NGO facilities (42 percent) were more likely than DHs (32 percent) to have all six infection control items.

# 4.2.6 Laboratory Diagnostic Capacity

The 2014 BFHS obtained information on two laboratory tests that are particularly important to diagnosing conditions among children: hemoglobin testing and stool microscopy. Table 4.5 shows that only 11 percent (26 percent excluding CCs) of facilities have hemoglobin test capacity, with the likelihood that the test is available varying widely by facility type. Within the public sector, almost all DHs (97 percent) and 75 percent of UHCs offer hemoglobin testing compared with 29 percent of MCWCs, 8 percent of union level facilities, and 4 percent of CCs. The majority of NGO facilities (70 percent) and private hospitals (81 percent) have the capacity to conduct hemoglobin testing.

# *Figure 4.3* Availability of all six infection control items for child curative care service area, by facility type



Note: The facility had the following six infection control items: soap, running water, alcohol-based disinfectant, latex gloves, sharps container, and waste receptacle.

Within public facilities, stool microscopy is limited to the higher level facilities; MCWCs, union level public facilities, and CCs do not conduct stool microscopy. Among the public facilities expected to provide stool microscopy, DHs (73 percent) were much more likely to have the test than UHCs (43 percent). Private hospitals (54 percent) and especially NGO facilities (13 percent) were both less likely than DHs to have the capacity for stool microscopy.

# 4.3 READINESS OF HEALTH FACILITIES TO PROVIDE CHILD CURATIVE CARE

The WHO identifies specific tracers or items that facilities must have to be considered ready to provide child curative care. In assessing the overall readiness of Bangladesh facilities to provide child curative care, this report used10 items from among the list of WHO tracer indicators (Service Availability and Readiness Assessment (SARA, WHO 2013):

- **IMCI guidelines:** National or other guidelines on IMCI available at facility.
- **IMCI trained staff:** At least one provider received in-service training on at least some components of IMCI.<sup>1</sup>
- Equipment: Child scale, thermometer, and growth chart.
- **Medicines:** ORS, zinc tablets/syrup, amoxicillin syrup/suspension/dispersible, paracetamol syrup/suspension, and mebendazole/albendazole.

Table 4.6 and Figure 4.4 presents information on the availability of these 10 items at Bangladesh health facilities that provide child curative care. The majority of facilities have the five basic medicines: mebendazole/albendazole (88 percent), paracetamol syrup/suspension (86 percent), amoxicillin syrup/suspension/dispersible (81 percent), ORS (79 percent), and zinc tablets or syrup (66 percent). Among the other five items, a thermometer is available in almost all facilities (94 percent). A functioning child scale is available at 61 percent of health facilities. Facilities are least likely to have a growth chart available (44 percent), followed by IMCI guidelines (51 percent) and IMCI trained staff (54 percent). The comparatively limited availability of a growth chart is a particular concern because more than one third of children under age 5 in Bangladesh, according to the 2014 BHFS, are stunted.

#### Table 4.6 Readiness of health facilities to provide child curative care services

Among facilities that offer outpatient curative care for sick children, the percentages that indicate the IMCI guideline, IMCI trained staff at any time, basic equipment and essential medicines available on the day of the survey, and percentage with all items, by background characteristics, Bangladesh HFS 2014

		IMCI				Zinc		Amoxicillin syrup, suspen- sion or	Para- cetamol syrup or	Meben- dazole/		Number of facilities offering outpatient curative care
Background characteristics	IMCI guidelines	(trained at any time) <sup>1</sup>	Child scale <sup>2</sup>	Thermo- meter	Growth chart	tablets or syrup	ORS	disper- sible	suspen- sion	Alben- dazole	Having all 10 items	for sick children
Facility type												
District and upazila public facilities DH MCWC UHC	<b>77.1</b> 75.8 57.0 81.5	<b>78.2</b> 72.6 67.4 81.3	<b>86.5</b> 98.4 86.0 84.8	<b>97.7</b> 96.8 95.3 98.3	<b>68.1</b> 58.1 65.1 70.2	<b>65.4</b> 75.8 27.9 71.7	<b>87.7</b> 98.4 46.5 94.8	<b>80.4</b> 75.8 91.9 78.6	<b>82.4</b> 88.7 91.9 79.5	<b>75.5</b> 83.9 94.2 70.2	<b>22.6</b> 22.6 8.1 25.7	<b>46</b> 5 7 34
Unionlevel public facilities UHFWC UHFWC	<b>54.8</b> 56.4	<b>53.2</b> 52.2	<b>65.3</b> 64.2	<b>84.3</b> 82.3	<b>46.9</b> 50.8	<b>33.9</b> 33.1	<b>47.5</b> 39.4	<b>81.7</b> 86.4	<b>84.4</b> 89.8	<b>84.8</b> 91.8	<b>4.7</b> 4.2	<b>359</b> 144
(upgraded) USC/RD	45.4 63.0	47.3 61.3	79.5 51.0	83.3 88.1	52.8 34.9	26.5 43.2	24.3 84.8	87.1 69.1	90.3 69.9	91.7 67.1	3.9 6.2	113 102
Public community clinic (CC)	47.8	54.7	55.9	96.8	40.6	77.2	89.3	81.6	86.9	91.3	10.0	936
NGO clinic/hospital	56.9	46.4	84.8	100.0	63.2	70.6	89.8	69.8	81.7	82.0	17.0	67
Private hospital	26.4	30.4	89.9	97.7	24.4	67.7	78.3	53.7	72.0	71.7	3.1	24
<b>Location</b> Urban Rural	54.9 50.2	52.0 54.4	86.3 59.2	98.2 93.5	53.8 43.0	67.1 65.3	86.5 77.9	70.4 81.3	78.4 86.2	78.3 89.2	16.0 8.8	106 1,327
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	66.5 42.8 38.0 50.9 45.7 77.1 57.9	66.9 48.7 57.0 44.5 54.0 57.0 58.6	62.5 59.1 50.1 61.3 57.6 83.7 70.0	92.5 94.5 92.3 92.5 94.0 98.5 92.4	51.2 41.9 30.3 48.3 35.5 71.9 44.0	76.5 53.6 67.8 61.6 66.9 75.6 60.5	84.7 72.7 75.4 73.8 85.0 90.5 72.7	85.4 80.0 80.2 78.6 78.8 80.6 85.1	92.1 87.3 80.7 86.3 82.8 91.4 85.1	92.2 85.0 84.5 87.3 87.7 96.8 94.9	13.5 6.0 5.1 6.5 12.0 21.3 5.8	112 265 379 195 190 196 96
Total	50.6	54.3	61.2	93.8	43.8	65.5	78.6	80.5	85.6	88.4	9.3	1,433
Total excluding CCs	55.8	53.5	71.1	88.3	50.0	43.4	58.4	78.6	83.2	82.9	7.9	497

Note: ORS = oral rehydration solution.

<sup>1</sup> At least one provider of child health services in the facility reported receiving in-service training in IMCI. Training refers only to in-service training. The training must have involved structured sessions, and does not include individual instruction that a provider might have received during routine supervision. <sup>2</sup> A scale with gradation of 250 grams, or a digital standing scale with gradation of 250 grams or less where an adult can hold a child to be weighed.

<sup>&</sup>lt;sup>1</sup> This indicator differs from the WHO recommendation that there must be at least one service provider who had inservice training on IMCI in the last 24 months.

Table 4.6 and Figure 4.5 show that, overall, only 9 percent (8 percent excluding CCs) of facilities that offer child curative care have all of the 10 items considered by WHO as necessary for a facility to be ready to provide child curative care. District and upazila public facilities (23 percent), NGO facilities (17 percent), and CCs (10 percent) are more likely than union level facilities (5 percent) and private hospitals (3 percent) to have all 10 items regarded as necessary to provide child curative care. Given the MOHFW's focus on maternal and child care services under the Health, Population and Nutrition Sector Development Program, the study identified a major gap in child care service readiness.



# *Figure 4.4* Availability of items (tracer indicators) in health facilities for readiness to provide child curative care





Note: All of the following items were required for a facility to be considered ready to provide child curative care: IMCI trained staff (at least one provider ever receiving in-service training on at least some components of IMCI), IMCI guidelines, equipment (child scale, thermometer, growth chart), and medicines (ORS, zinc dispersible tablets/syrup, amoxicillin syrup/suspension, paracetamol syrup/suspension, and mebendazole/albendazole) BHFS 2014

## 4.4 BASIC MANAGEMENT AND ADMINISTRATIVE SYSTEMS

### 4.4.1 Personal Supervision and Training

Training is another important management function to support health care providers. Periodic inservice training can keep providers up-to-date and help them refresh their knowledge and skills. Around one third (21 percent excluding CCs) of interviewed providers of child health services reported receiving inservice training related to child health in the 24 months before the assessment (Table 4.7). Providers from CCs (47 percent) were more likely to have received training related to child health than providers from other public facilities, NGO facilities, and private hospitals (all around 20 percent).

Table 4.7 Supportive management for providers of child health services

Among interviewed child health service providers, the percentage who report receiving training related to their work and personal supervision during the specified time periods, by background characteristics, Bangladesh HFS 2014

	Percentage o	f interviewed providers	who received:	
Background characteristics	Training related to child health during the 24 months preceding the survey <sup>1</sup>	Personal supervision during the 6 months preceding the survey <sup>2</sup>	Training related to child health during the 24 months and personal supervision during the 6 months preceding the survey	Number of interviewed chilc health service providers
Facility type				
District and upazila public facilities DH MCWC UHC	1 <b>9.7</b> 19.8 15.5 20.2	<b>96.2</b> 93.0 98.1 96.7	<b>19.0</b> 19.3 15.5 19.2	<b>416</b> 68 33 315
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>21.4</b> 18.7 19.8 27.4	<b>89.6</b> 90.1 92.4 85.8	<b>18.4</b> 15.2 18.4 23.2	<b>726</b> 288 237 201
Public community clinic (CC)	47.2	93.8	44.7	1,872
NGO clinic/hospital	21.0	94.4	19.8	263
Private hospital	20.5	85.0	17.4	108
<b>Location</b> Urban Rural	18.6 39.0	92.7 93.1	17.3 36.5	596 2,789
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	43.7 33.5 39.6 30.0 34.8 30.2 33.0	90.1 93.1 91.6 93.5 95.6 95.8 92.2	40.3 31.7 37.1 26.3 33.3 29.7 30.1	256 669 1,014 458 415 353 221
Total	35.4	93.0	33.1	3,385
Total excluding CCs	20.8	91.9	18.7	1,514

 <sup>1</sup> Training refers only to in-service training. The training must be structured sessions; it does not include individual instruction that a provider might have received during routine supervision.
<sup>2</sup> Personal supervision refers to any form of technical support or supervision from a facility-based supervisor or from a visiting

<sup>2</sup> Personal supervision refers to any form of technical support or supervision from a facility-based supervisor or from a visiting supervisor. It may include, but is not limited to, review of records and observation of work, with or without any feedback to the health worker.

Personal supervision can be an important source of support and direction for health facility staff members. Supervision of child health care providers is fairly common throughout health care facilities in Bangladesh; nine out of ten providers from all facility types except private hospitals (85 percent) reported receiving personal supervision during the six months prior to the BFHS (Table 4.7).

Table 4.7 shows that 33 percent (19 percent excluding CCs) of providers of child health services had recently received both personal supervision and in-service training. Forty five percent of the providers

from CCs were likely to receive both recent in-service training and personal supervision as compared with one fifth of providers from other facility types.

## 4.4.2 In-service Training by Topic

Providers of child health services were asked about in-service training on specific topics related to child health. Table 4.8 shows that the diarrhea diagnosis or treatment and IMCI were the most common topics of training. More than 4 in 10 providers reported ever receiving training on these topics, and one-fifth had recent training.

Table 4.8 Training for child health service providers

Among interviewed child health service providers, the percentages who report receiving in-service training on topics related to child health during the specified period before the survey, by background characteristics, Bangladesh HFS 2014

	Percentage EPI/co	d chain	IN	1CI	ARI		Diarrhea d treat	Number of	
Background characteristics	During the past		During the past	At any time	During the past		During the past		interviewed child health service providers
Facility type									
District and upazila public facilities	5.8	27.9	11.6	40.6	7.8	32.2	8.0	35.5	416
DH	5.7	28.8	9.8	35.3	6.6	29.9	6.3	28.3	68
MCWC UHC	5.5 5.9	43.8 26.1	7.7 12.4	42.0 41.6	4.5 8.4	42.3 31.6	5.4 8.6	45.0 36.1	33 315
	5.9	20.1	12.4	41.0	0.4	31.0	0.0	30.1	315
Unionlevel public									
facilities	5.7	34.3	11.1	44.5	6.4	38.6	8.6	45.3	726
UHFWC	5.8	36.0	8.3	45.3	6.5	39.6	7.0	44.3	288
UHFWC (upgraded)	4.0	33.5	10.1	38.2	4.6	33.8	7.6	43.0	237
USC/RD	7.4	32.8	16.2	50.9	8.5	42.9	12.0	49.6	201
Public community	00 F	42.0	20.0	40.0		24 5	<u> </u>	40.0	4 070
clinic (CC)	23.5	43.6	30.2	48.2	20.3	31.5	29.6	49.2	1,872
NGO clinic/hospital	9.4	33.9	6.8	32.6	5.4	27.8	6.6	33.1	263
Private hospital	12.7	17.8	12.5	21.4	14.6	23.5	15.8	24.1	108
Location									
Urban	8.3	28.1	9.9	32.7	8.1	28.5	8.3	31.5	596
Rural	17.7	40.2	23.9	46.9	15.8	33.4	22.8	47.5	2,789
Division									
Barisal	21.3	44.3	30.6	56.3	21.4	46.0	24.1	49.7	256
Chittagong	13.1	27.8	18.9	38.4	13.4	31.2	20.7	41.8	669
Dhaka	21.5	46.1	23.7	44.1	15.6	29.7	20.8	47.9	1,014
Khulna	15.4	40.5	13.1	36.2	11.9	31.4	12.9	34.2	458
Rajshahi	10.4	35.8	21.8	50.6	9.9	29.8	18.2	41.6	415
Rangpur	12.9	34.6	22.6	52.4	19.0	41.4	26.4	55.5	353
Sylhet	11.0	30.3	22.8	42.8	10.6	27.8	21.0	42.3	221
Total	16.1	38.1	21.4	44.4	14.4	32.5	20.2	44.7	3,385
Total excluding CCs	6.9	31.3	10.6	39.7	7.2	33.9	8.6	39.0	1.514

Note: EPI = Expanded Program on Immunization; IMCI = Integrated Management of Childhood Illness; ARI= Acute Respiratory Infection

## Key Findings

- Eight in ten health facilities in Bangladesh provide, prescribe, or counsel clients about at least one modern family planning (FP) method.
- Private hospitals are less likely to offer modern FP methods (21 percent), long-acting and permanent family planning methods (LAPMs) (19 percent), and male or female sterilization services (14 percent) than other health facilities.
- Three quarters of facilities in Bangladesh provide at least two temporary modern FP methods and one quarter of facilities provide at least four temporary modern FP family methods.
- More than one-fourth (28 percent) of facilities in Bangladesh provide at least one type of LAPM to clients.
- Male or female sterilization services are provided in 5 percent of all facilities; urban facilities (30 percent) are more likely to provide male or female sterilization services than rural facilities (2 percent).
- The most commonly provided temporary modern FP methods in Bangladesh health facilities are male condom (76 percent), combined or progestin-only oral pill (72 percent), and combined or progestin only injectable (68 percent).
- More than one-fourth (27 percent) of all facilities provide the intrauterine contraceptive device method (IUCD); fewer facilities provide implants (7 percent), tubal ligation (4 percent), and vasectomy (4 percent).
- Family planning services are less likely to be available at district hospitals, union sub-centers/rural dispensaries (USC/RDs), and private hospitals than at other health facilities.
- Nationwide, 87 percent of facilities that report providing FP methods had every method that they provide available on the day of the assessment visit.
- Over half of facilities (54 percent) that offer FP services have FP guidelines available at the service site.
- Excluding community clinics (CCs), the majority of the facilities that offer FP services had an examination bed or couch (83 percent), and a light (61 percent).
- Nearly three in ten FP providers received recent in-service training and supervision.
- Only one in four of facilities that offer FP services has readiness to provide FP services, i.e., the facility is equipped with FP guidelines, at least one trained staff, a blood pressure apparatus, and three modern contraceptive methods (oral pill, injectables, or condoms).

# 5.1 BACKGROUND

Examily planning (FP) is profoundly important for maternal and child health and a key element in upholding reproductive rights. Therefore, wherever maternal health, reproductive health, or child health services are provided, facilities should strive to increase the appropriate use of FP and contraceptive services and to provide client education.

The Government of Bangladesh (GOB) has a National Population Policy (MOHFW 2012) that seeks to reduce fertility to replacement level by 2015. Reflecting this commitment, the Health, Population, and Nutrition Sector Development Program (HPNSDP) has embraced strategies for making FP services available, accessible, acceptable, and affordable to all women and men of reproductive age at public, private, and NGO health facilities. The HPNSDP strategies strive to increase overall use of FP to 72 percent by 2016 (MOHFW 2011; Strategic Plan for HPNSDP 2011-16).

Use of FP among married women in Bangladesh has increased gradually over the past four decades, from 8 percent in 1975 to 62 percent in 2014. Looking at the changes in the past decade, use of modern contraceptive methods increased by 7 percentage points, from 47 percent in 2004 to 54 percent in 2014. Use of oral pills peaked in 2007 (29 percent) and then dropped to 27 percent in 2011 where it remained in 2014. The use of injectables rose from 7 percent in 2007 to 12 percent in 2014. The use of LAPM of contraception increased only modestly from 7 percent in 2007 to 8 percent in 2011, and remained at that level between 2011 and 2014. Male sterilization and implant usage also increased between 2007 and 2014, although the current levels of use are very low at 1 percent and 2 percent, respectively (NIPORT et al. 2009; NIPORT et al. 2013; NIPORT et al. 2015).

This chapter provides detailed information on how FP services are delivered. The Bangladesh FP program can use these data to improve the availability and quality of FP services. The chapter explores four key areas related to the provision of FP services at health facilities in Bangladesh:

- Availability of FP services. Section 5.2, with Tables 5.1 through 5.4 and Figures 5.1 and 5.2, examines the availability of FP services. The FP services are considered available if a facility provides FP methods to clients at the facility, prescribes methods which the client must obtain elsewhere, or counsels about FP.
- Availability of guidelines, trained staff, equipment, and infection control items. Section 5.3, including Tables 5.5 and 5.6 and Figure 5.3, addresses the extent to which facilities that offer FP family services have the capacity to support quality services, including the necessary service guidelines, trained staff, equipment, and infection control materials.
- **Readiness of health facilities to provide FP services.** Section 5.4, including Table 5.7 and Figure 5.4 and 5.5, measures the readiness of health facilities to offer FP services using the WHO specified items or tracer indicators that facilities must have to be considered ready to offer the FP services.
- **Basic management and administrative systems.** Section 5.5, including Tables 5.8 and 5.9, evaluates training and supervision that are important to support the delivery of high-quality FP services.

# 5.2 AVAILABILITY OF FAMILY PLANNING SERVICES

# 5.2.1 Family Planning Services

Family planning (FP) methods differ in how they function and in their effectiveness, side effects, and mode of use. The acceptability and desirability of FP methods also differ among users. Thus, a facility that offers a wide variety of FP methods is best able to meet client needs. Although a broad mix of methods is optimal, facilities are expected to differ in the exact mix of methods they offer because of differences in provider qualifications, training, and the infrastructure required to provide certain methods safely. Methods that can be offered safely with minimal training are pills, injectables, and condoms as well as counseling for any of the FP methods. Safely offering implants, IUCDs, female sterilization, and male sterilization requires a higher level of skill and a more developed infrastructure.

The 2014 BHFS obtained information on the availability of FP services at each of the public, private, and NGO health facilities in the survey sample. Table 5.1 shows the availability of FP services (modern FP

methods, LAPM, male or female sterilization, and any FP). Facilities were considered to offer FP services if they provided the methods to clients at the facility, prescribed the methods although the clients had to obtain the methods elsewhere, or counseled clients on the methods.

**Modern FP method services.** Eighty-one percent (irrespective of the inclusion or exclusion of CCs) of health facilities offer, i.e., provide, prescribe, or counsel clients on, at least one modern FP method. District and upazila public facilities (94 percent), union level public facilities (83 percent), CCs (82 percent), and NGO facilities (88 percent) are much more likely than private hospitals (21 percent) to offer modern FP services. Among the public facilities, DHs (60 percent) and USCs/RDs (61 percent) are the least likely to offer modern FP services. Rural facilities (82 percent) are slightly more likely than urban facilities (72 percent) to offer modern FP services. Facilities in Dhaka, at 67 percent, are much less likely than facilities in other divisions (from 75 percent in Rajshahi to 94 percent in Khulna, Rangpur, and Sylhet) to provide services related to modern FP methods.

**Long-acting and permanent method (LAPM) services.** Overall, more than two in three facilities (69 percent excluding CCs) provide, prescribe, or counsel clients on LAPM (IUCDs, implants, and male or female sterilization). As expected, the percentage of facilities that offer LAPM-related services decreases when CCs are included (48 percent including CCs) in the analysis. Among other public facilities, 98 percent of upazila health complexes (UHCs) and 96 percent of maternal and child welfare centers (MCWCs) offer LAPM, as compared with 57 percent of DHs. More than three in four NGO facilities (77 percent) offer LAPM services as compared with only 19 percent private hospitals. Urban facilities (68 percent) are more likely than rural facilities (46 percent) to offer LAPM. Facilities in Barisal, at 36 percent, are less likely than facilities in other divisions (from 41 percent in Dhaka to 63 percent in Rangpur) to offer LAPM.

**Male or female sterilization services.** More than one in three health facilities (36 percent excluding CCs) offer male or female sterilization services. The UHCs (94 percent) and MCWCs (83 percent) are more likely than DHs (48 percent), NGO facilities (51 percent), or private hospitals (14 percent) to offer male or female sterilization services. Urban facilities (52 percent) are more likely than rural facilities (27 percent) to offer male or female sterilization services.

#### Table 5.1 Availability of family planning services

Among all facilities, the percentages that offer modern family planning methods, long-acting and permanent methods, and male or female sterilization, and the percentage that offer any family planning by background characteristics, Bangladesh HFS 2014

		Methods of fami	ily planning (FP)		
- Background characteristics	Percentage offering any FP <sup>1</sup> (including emergency contraceptive)	Percentage offering any modern FP <sup>2</sup> (including emergency contraceptive)	Percentage offering any long acting and permanent methods <sup>3</sup>	Percentage offering male or female sterilization <sup>4</sup>	Number of facilities
Facility type					
District and upazila public facilit	94.3	94.2	92.7	87.1	47
DH	59.7	59.7	56.5	48.4	5
MCWC	97.8	96.7	95.7	82.6	8
UHC	98.7	98.7	97.5	93.9	35
Union level public facilities	85.1	83.4	69.6	-	374
UHFWC	94.3	93.1	77.1	-	149
UHFWC (upgraded)	93.7	91.8	78.9	-	117
USC/RD	63.0	60.7	49.1	-	108
Public community clinic (CC)	82.9	81.6	36.3*	-	1,010
NGO clinic/hospital	90.3	88.3	77.1	51.3	81
Private hospital	20.7	20.5	18.9	14.3	36
_ocation					
Urban	73.8	72.4	67.9	51.8	130
Rural	83.6	82.2	46.2	26.9	1,418
Division					
Barisal	88.7	88.0	35.8	13.0	116
Chittagong	83.5	82.9	49.0	39.5	287
Dhaka	70.4	66.9	40.8	22.3	421
Khulna	94.6	93.5	52.7	30.8	197
Rajshahi	75.9	75.4	51.6	25.3	224
Rangpur	94.4	94.1	63.0	46.4	205
Sylhet	94.1	94.1	41.7	13.6	97
Fotal	82.7	81.4	48.0	29.0	1,548
Total excluding CCs	82.5	80.9	69.4	35.5	538

"-" Means male or female sterilization is not offered at union level public facilities or at public community clinics.

\* Among long acting and permanent methods, community clinics only provide injectables.

<sup>1</sup> Facility provides, prescribes, or counsels clients on any of the following: contraceptive pills (combined or progestin-only), injectables (combined c progestin-only), implants, IUCDs, male condoms, female sterilization (tubal ligation) or male sterilization (vasectomy), emergency contraceptive, or periodic abstinence

<sup>2</sup> Facility provides, prescribes, or counsels clients on any of the following long-term and permanent methods of family planning:

implants, intrauterine contraceptive devices (IUCDs), female sterilization (tubal ligation), or male sterilization (vasectomy).

<sup>4</sup> Providers in the facility perform male or female sterilization or counsel clients on male or female sterilization.

### 5.2.2 Frequency of Availability of Family Planning Services

It is important that facilities offer FP services regularly enough to meet the clients' needs. Table 5.2 provides information on frequency of availability of FP services. About three-fourths (82 percent excluding CCs) of health facilities that offer FP services do so on every day the facility is open. District and upazila public facilities (97 percent) and NGO facilities (95 percent) are more likely to provide FP services every day than other public facilities and private hospitals. The frequency of availability of services varies by location. Urban facilities (94 percent) are more likely to provide FP services on every day than rural facilities (73 percent). The proportion of facilities that offer FP services every day varies from 66 percent in Khulna to more than 90 percent of facilities in the Rangpur division.

#### Table 5.2 Frequency of availability of family planning services

Among facilities that offer any family planning services, the percentages of facilities that offer the services every day<sup>1</sup> or less frequently than every day, by background characteristics, Bangladesh HFS 2014

	Percentage of fa family plannin are offe	ng services	Number of facilities offering any family
Background	Provides but not	Provides	planning
characteristics	everyday	everyday	services
Facility type			
District and upazila public			
facilities	3.4	96.6	45
DH	0.0	100.0	3
MCWC	7.8	92.2	7
UHC	2.8	97.2	34
Union level public facilities	23.2	76.8	318
UHFWC	22.2	77.8	140
UHFWC (upgraded)	20.2	79.8	110
USC/RD	30.0	70.0	68
Public community clinic (CC)	28.8	71.2	837
NGO clinic/hospital	4.6	95.4	73
Private hospital	35.8	64.2	7
Location			
Urban	5.9	94.1	96
Rural	26.8	73.2	1,185
Division			
Barisal	23.7	76.3	103
Chittagong	23.6	76.4	240
Dhaka	32.6	67.4	296
Khulna	33.8	66.2	187
Rajshahi	24.1	75.9	170
Rangpur	6.6	93.4	194
Sylhet	30.9	69.1	91
Total	25.2	74.8	1,281
Total excluding CCs	18.3	81.7	444

<sup>1</sup> Every day refers to all working days when the facility is open.

<sup>2</sup> Includes services for contraceptive pills (combined or progestin-only), injectables (combined or progestin-only), implants, intrauterine contraceptive devices (IUCDs), male condoms, periodic abstinence, tubal ligation, vasectomy, or any other family planning method such as diaphragm or spermicides.

## 5.2.3 Availability of Specific Family Planning Methods

The health facilities in Bangladesh differ in the modern FP methods they provide. Table 5.2.1 shows the sources through which modern FP methods are promoted and distributed in Bangladesh.

Public facilities	NGOs	Private facilities	Others private sources
		Condom	
DH MCWC UHC UHFWC UHFWC upgraded USC/RD CC Family welfare assistants	Static clinic Depot holders Fieldworkers	Private hospitals/clinics Doctors-qualified traditional healers Pharmacies	Shops Friends/relatives
		Oral pill	
DH MCWC UHC UHFWC UHFWC upgraded USC/RD CC Family welfare assistants	Static clinic Depot holders Fieldworkers	Private hospitals/clinics Doctors-qualified traditional healers Pharmacies	Shops Friends/relatives
		Injectables	
DH MCWC UHC UHFWC UHFWC upgraded USC/RD CC Family welfare assistants	Static clinic	Pharmacies (Blue star-Social Marketing Company-SMC)	NA
		IUCD	
DH MCWC UHC UHFWC USC/RD	Static clinic	NA	NA
		Sterilization	
District hospitals MCWC UHC Sterilization camps	Static Clinic	Private hospitals/clinics	NA

The survey obtained information on the availability of modern FP methods. Tables 5.3.1 and 5.3.2 and Figure 5.1 show the availability of modern FP methods in different type of health facilities. The most commonly provided temporary modern FP methods in health facilities are male condom (76 percent), combined or progestin-only oral pill (72 percent), and combined or progestin only injectable (68 percent). Among public facilities and district hospitals, USC/RDs and CCs are less likely to provide any of these three methods than other public facilities. For example, a difference was observed in injectables that are available at 64 percent of CCs as compared with 75 percent of all facilities excluding CCs. Overall, the services of temporary modern FP methods are less likely to be available at district hospitals, USC/RDs, and private hospitals than other health facilities.

More than one-fourth (27 percent) of all facilities provide IUCD services, 7 percent of facilities provide implants, 4 percent of facilities provide tubal ligations and 4 percent of facilities provide vasectomies. These low percentages reflect the fact that the services of these methods are not provided at certain types of public facilities, particularly CCs. Union level public facilities have no provision for providing implants, tubal ligation, or vasectomy services while CCs have no provision for providing IUCDs, implants, tubal ligation, or vasectomy services. Assessment of the variation in the availability of these methods by facility type showed that 85 percent of UHCs and 84 percent of MCWCs provide IUCDs services, as compared to 56 percent of union level public facilities, 59 percent of NGO facilities, and 8 percent of private hospitals. Implants are more widely available in UHCs (84 percent) and MCWCs (80

percent) than district hospitals (39 percent), NGO facilities (26 percent), and private hospitals (7 percent). Seven of ten UHCs and half of MCWCs provide tubal ligations and vasectomy services, as compared with six out of ten district and upazila public facilities, and one-fifth of NGO facilities. Only 5 percent of private hospitals provide tubal ligations and vasectomy services.

Three quarters of health facilities in Bangladesh provide at least two temporary modern FP methods. The UHCs (98 percent), MCWCs (97 percent), UHFWCs (90 percent) and NGO facilities (81 percent) are more likely to provide services of at least two temporary modern FP methods than district hospitals (57 percent) and USD/RDs (58 percent). However, only 10 percent of private hospitals provide at least two modern FP methods.

The availability of FP services for LAPM varies because these methods require more skills. For example, UHCs (92 percent), MCWCs (88 percent), NGOs (65 percent), and UHFWCs (62 percent) are more likely to provide LAPM services than district hospitals (53 percent), USC/RDs (35 percent) and private hospitals (12 percent). The availability of FP services that provide male or female sterilization has become significantly low with only 12 percent of facilities (excluding CCs) providing male or female sterilization services; UHCs (70 percent) and MCWCs (57 percent) are more likely to provide male or female sterilization services than district hospitals (34 percent), NGOs (21 percent), and private hospitals (6 percent).

#### Table 5.3.1 Methods of family planning provided<sup>1</sup>

Among all facilities, the percentages of facilities that provide clients with specific modern family planning methods, by background characteristics, Bangladesh HFS 2014

Methods provided	District and upazila public facilities	DH	MCWC	UHC	Union level public facilities	UHFWC	UHFWC (up- graded)	USC/RD	Public com- munity clinic (CC)	NGO clinic/ hospital	Private hospital	Total	Total excluding CCs
Combined or													
progestin-only oral													
pill	91.1	58.1	94.6	95.2	78.3	86.0	89.1	55.7	69.9	81.3	8.0	71.7	75.2
Combined or progestin													
only injectable	91.7	54.8	94.6	96.5	78.3	86.8	87.7	56.2	64.4	76.6	8.6	68.0	74.6
Male condom	91.5	56.5	96.7	95.5	80.7	89.4	90.2	58.5	76.0	78.1	8.6	76.2	76.5
Intrauterine													
contraceptive device	80.3	46.8	83.7	84.5	55.8	61.5	67.9	34.8	-	59.4	8.0	26.6	55.4
Implant	78.3	38.7	80.4	83.7	-	-	-	-	-	26.3	7.0	7.1	17.3
Tubal ligation	63.2	33.9	55.4	69.2	-	-	-	-	-	16.6	5.1	4.1	10.3
Vasectomy	61.8	29.0	53.3	68.5	-	-	-	-	-	18.0	5.7	3.7	10.6
At least one modern													
method	93.4	58.1	96.7	97.9	81.3	89.8	90.6	59.3	77.3	85.5	13.1	77.7	78.5
At least 2 temporary													
modern methods <sup>2</sup>	93.2	56.5	96.7	97.9	80.8	89.8	90.6	57.6	73.1	81.0	10.2	74.6	77.3
At least 4 temporary													
modern methods <sup>2</sup>	85.7	53.2	87.0	90.2	53.3	59.1	65.1	32.5	11.5	56.3	6.4	26.1	53.5
Any LAPM	87.1	53.2	88.0	91.9	56.2	61.9	68.6	34.8	12.3	65.2	11.5	27.9	57.3
Male or female													
sterilization	64.2	33.9	56.5	70.3	-	-	-	-	-	20.9	6.3	4.5	11.5
Number of facilities	47	5	8	35	374	149	117	108	1,010	81	36	1,548	538

"-" Means the specific family planning methods are not provided at this type of facilities.

<sup>1</sup> The facility reports that it stocks the method in the facility and makes it available to save clients from having to obtain it elsewhere. In the case of vasectomy and procedures. <sup>2</sup> Any methods other than male or female sterilization.

#### Table 5.3.2 Methods of family planning provided<sup>1</sup>

Among all facilities, the percentages of facilities that provide clients with specific modern family planning methods, by background characteristics, Bangladesh HFS 2014

	Loca	ation				Division				
Methods provided	Urban	Rural	Barisal	Chittagong	Dhaka	Khulna	Rajshahi	Rangpur	Sylhet	Total
Combined or progestin-only oral										
pill	66.0	72.3	81.2	73.8	56.3	81.3	67.6	83.7	86.4	71.7
Combined or progestin only										
injectable	65.1	68.2	80.7	68.9	46.4	77.9	65.0	91.9	79.7	68.0
Male condom	65.4	77.2	85.8	74.4	60.4	89.6	71.2	93.6	86.1	76.2
Intrauterine contraceptive device	52.7	24.2	23.2	19.6	28.2	23.0	26.0	39.4	25.9	26.6
Implant	36.9	4.3	8.8	8.5	8.6	5.1	3.3	7.4	6.2	7.1
Tubal ligation	26.4	2.1	4.1	4.0	5.4	3.8	2.9	3.5	3.6	4.1
Vasectomy	26.9	1.6	4.1	2.7	5.7	3.8	2.5	2.2	3.5	3.7
At least one modern method At least 2 temporary modern	70.2	78.4	87.9	77.1	61.2	91.5	72.3	93.6	89.8	77.7
methods <sup>2</sup> At least 4 temporary modern	67.0	75.3	84.5	74.1	56.9	85.9	70.1	93.6	87.3	74.6
methods <sup>2</sup>	52.9	23.6	23.0	19.5	27.4	22.3	25.0	39.6	25.5	26.1
Any LAPM	58.7	25.1	24.3	23.3	28.9	23.3	26.8	40.3	27.7	27.9
Male or female sterilization	29.7	2.2	4.1	4.5	6.3	3.8	2.9	4.2	3.7	4.5
Number of facilities	130	1,418	116	287	421	197	224	205	97	1,548

<sup>1</sup> The facility reports that it stocks the method in the facility and makes it available to clients without clients having to go elsewhere to obtain it. In the case of vasectomy and tubal ligation, facility reports that providers in the facility perform the procedures. <sup>2</sup> Any methods other than male or female sterilization.

### Figure 5.1 Percentage of facilities providing any modern family planning methods; at least two temporary methods; any LAPM, male or female sterilization, by facility type



■ Male or female sterilization ■ Any LAPM ■ At least 2 temporary methods ■ Any modern FP methods BHFS 2014

### 5.2.4 Availability of Family Planning Methods on the Day of the Assessment

Stock-outs of FP methods can put a woman at risk of unintended pregnancy. To obtain information on stock-outs, the 2014 BHFS assessed the availability of each method on the day of the survey. The assessment did not rely on facility reports. Instead, during data collection in each facility, the interviewers observed whether the FP commodities were available or in stock that day.

As Table 5.4 and Figure 5.2 show, the majority of facilities that provide the most popular methods had these methods in stock on the day of the survey. Overall, 87 percent of facilities that provide FP had every method that they provided available in the facility on the day of the visit. The highest stock-out rates were found for the IUCD (13 percent) and the implant (22 percent). Overall, Figure 5.2 shows that private hospitals are least likely to have the FP methods they provide in stock; just over half had every method they provided available on the day of the BHFS visit.

#### Table 5.4 Availability of family planning commodities

Among facilities that provide<sup>1</sup> the indicated modern family planning method, the percentages where the commodity was observed to be available on the day of the survey, by background characteristics, Bangladesh HFS 2014

Background characteristics	Combined or progestin only oral pills	Combined or progestin only injectable	Male condom	Intrauterine contraceptive device	Implement	Every method provided by facility was available on day of survey
	orar pilis	Injectable	Male condom	device	Implant	day of survey
Facility type						
District and upazila						
public facilities	99.4	95.3	98.4	93.8	92.9	86.0
DH	97.2	97.1	97.1	89.7	79.2	80.6
MCWC	100.0	96.6	98.9	96.1	95.9	92.1
UHC	99.5	94.9	98.4	93.6	93.2	85.1
Union level public						
facilities	96.3	95.1	96.4	91.4	-	87.0
UHFWC	97.6	95.6	97.2	93.8	-	86.5
UHFWC (upgraded)	94.8	97.0	97.4	91.1	-	88.0
USC/RD	95.9	90.8	93.2	-	-	86.5
Public community						
clinic (CC)	97.5	90.5	95.3	-	-	87.2
NGO clinic/hospital	97.1	97.1	99.1	91.8	91.5	87.7
Private hospital	80.1	63.0	63.0	40.3	31.9	53.2
Location						
Urban	96.9	95.3	97.2	90.1	90.6	85.0
Rural	97.2	92.0	95.7	86.8	67.9	87.2
Division						
Barisal	98.2	92.4	94.4	93.4	90.3	89.2
Chittagong	97.2	93.1	94.6	97.2	65.6	89.9
Dhaka	93.9	84.5	92.1	89.1	79.2	80.8
Khulna	97.9	92.5	93.3	71.0	79.2	81.9
Rajshahi	97.1	91.2	100.0	70.1	87.9	83.3
Rangpur	99.2	97.7	100.0	98.1	90.6	95.8
Sylhet	99.6	98.6	99.8	86.6	51.3	94.2
Total	97.2	92.3	95.8	87.4	77.9	87.1
Total excluding CCs	96.6	95.2	96.8	91.3	81.1	86.7

Note: The denominators for each characteristic method combination are different and are not shown in the table.

"-" Means the specific family planning methods are not provided at this type of facilities.

The combined oral contraceptive pills, injectable contraceptives, and the male condom measures presented in the table comprise the medicines and commodities domain for assessing readiness to provide family planning services within the health facility assessment methodology proposed by WHO and USAID (2012). Each commodity or method shown in this table was observed to be available in the service area or location where commodities are stored, and at least one of the observed commodities or methods was valid, i.e., within expiration date.

<sup>1</sup> The facility reports that it stocks the method in the facility and makes it available to clients without clients having to go elsewhere to obtain it.

# *Figure 5.2* Percentage of facilities with family planning commodities (pills, injectables, condom, IUCD, implants) available on the day of survey



# 5.3 AVAILABILITY OF SERVICE GUIDELINES, TRAINED STAFF, EQUIPMENT, AND INFECTION CONTROL ITEMS

# 5.3.1 Availability of Service Guidelines, Trained Staff, and Equipment

To provide quality FP services to clients, facilities should be able to ensure some level of privacy for consultations and have FP guidelines, appropriately trained providers, and the basic supplies and equipment. Table 5.5 provides information on the availability of guidelines, trained staff, and equipment for the provision of FP services. At this point, text references to the base population for indicators in sections 5.3 and 5.4 are facilities that offer any modern FP services.

Over half (63 percent excluding CCs) of facilities that offer modern FP services had FP guidelines available at the service site. Among public facilities, CCs were least likely (49 percent) to have FP guidelines, and among all facilities, private hospitals (36 percent) were least likely to have FP guidelines. Urban facilities (71 percent) were more likely than rural facilities (53 percent) to have the FP guidelines.

Fifty seven percent (71 percent excluding CCs) of facilities that offer modern FP services reported having at least one staff member who had ever received in-service FP training. District and upazila public facilities (82 percent) and NGO facilities (77 percent) were most likely to have trained staff than CCs (50 percent) and private hospitals (29 percent). The percentages with trained staff decrease considerably when the focus shifts to providers with recent in-service FP training, i.e., training in the past 24 months. For example, 93 percent of MCWCs had at least one staff who had ever received in-service FP training; however, only 46 percent had a provider who had received training in the past 24 months.

In addition to service guidelines and adequately trained staff, some basic equipment and items are necessary for the provision of quality services. These include blood pressure apparatus, examination bed, samples of FP methods, and visual aids. Eighty-five percent (88 percent excluding CCs) of facilities that offer modern FP services had a blood pressure apparatus available in the facility or at the service site on the day of the visit. District and upazila public facilities (97 percent), NGO facilities (97 percent), and union level public facilities (85 percent) are more likely than other facilities to have a blood pressure apparatus.

#### Table 5.5 Guidelines, trained staff, and basic equipment for family planning services

Among facilities that offer any modern family planning methods, the percentage with family planning guidelines, the percentage with at least one staff member recently trained and trained at any time on family planning service delivery, and the percentage with the indicated equipment observed to be available on the day of the survey, by background characteristics, Bangladesh HFS 2014

	any mo	ge of facilitie dern family   and having:	planning	_			Equipment				
Background characteristics	Guide- lines on family planning <sup>1</sup>	Staff trained in family planning during past 24 months <sup>2</sup>	Staff trained in family planning at any time <sup>2</sup>	Blood pressure appara- tus <sup>3</sup>	Exami- nation light	Exami- nation bed or couch	Samples of family planning methods	Pelvic model for IUCD <sup>4</sup>	Model for showing condom use	Other family planning- specific visual aid <sup>5</sup>	Number of facilities offering any modern family planning methods
Facility type											
District and upazila public facilities DH MCWC UHC	<b>75.2</b> 83.8 76.4 74.2	<b>35.6</b> 45.9 46.1 32.4	<b>82.1</b> 73.0 93.3 80.5	<b>96.8</b> 94.6 94.4 97.5	<b>78.2</b> 78.4 84.3 76.8	<b>94.7</b> 94.6 96.6 94.3	<b>90.5</b> 89.2 89.9 90.7	<b>60.4</b> 59.5 67.4 59.0	<b>69.8</b> 67.6 73.0 69.3	<b>87.9</b> 86.5 86.5 88.3	<b>45</b> 3 7 34
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>58.5</b> 60.0 58.3 55.5	<b>27.3</b> 31.3 26.4 20.3	<b>68.5</b> 71.6 71.1 57.7	<b>85.2</b> 83.2 86.3 87.8	<b>52.4</b> 49.4 56.3 52.1	<b>79.6</b> 76.9 86.6 74.0	<b>71.9</b> 73.1 71.9 69.7	<b>36.9</b> 35.0 41.0 34.4	<b>44.9</b> 44.1 44.8 46.5	<b>75.8</b> 78.1 76.6 69.7	<b>312</b> 139 108 65
Public community clinic (CC)	49.2	33.5	50.4	83.4	40.1	73.0	61.6	11.9	28.1	63.8	825
NGO clinic/hospital	78.0	39.0	76.9	97.4	84.2	92.2	88.9	51.8	69.9	82.8	72
Private hospital	36.4	13.7	28.8	84.4	84.4	74.5	53.1	39.2	31.4	50.1	7
<b>Location</b> Urban Rural	71.3 52.6	33.9 32.1	73.7 56.1	95.8 84.3	82.4 44.4	90.4 75.4	87.3 65.0	54.4 19.7	67.7 33.5	78.4 67.8	94 1,166
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	57.8 50.4 50.8 49.9 53.6 66.1 52.5	35.5 34.2 39.3 27.9 17.3 27.6 47.8	55.3 61.0 70.2 49.7 45.9 49.8 63.7	78.3 85.4 77.9 90.9 84.9 95.9 80.9	42.4 36.0 44.6 51.6 44.9 68.7 40.3	65.1 70.7 64.7 89.1 79.5 86.7 89.1	69.5 56.1 59.4 69.0 65.7 81.0 80.1	14.8 12.1 20.1 17.2 17.1 52.7 19.3	31.3 26.3 26.7 37.7 35.2 64.6 34.2	75.1 60.7 52.9 67.2 64.8 94.7 85.4	103 238 282 185 169 193 91
Total	54.0	32.2	57.4	85.1	47.2	76.5	66.7	22.3	36.1	68.6	1,260
Total excluding CCs	63.0	29.8	70.6	88.4	60.8	83.2	76.3	41.8	51.3	77.8	435

Note: The measures presented in the table with guidelines for family planning and staff trained in FP comprise the staff and training domains, and blood pressure apparatus comprises the equipment domain, for assessing readiness to provide family planning services within the health facility assessment methodology proposed by WHO and USAID (2012).

<sup>1</sup> National guidelines or any other guidelines on family planning.

<sup>2</sup> The facility had at least one interviewed staff member providing the service who reports in-service training in some aspect of family planning. The training must involve structured sessions and does not include individual instruction that a provider might have received during routine supervision.

<sup>3</sup> A functioning digital blood pressure apparatus or a manual sphygmomanometer with a stethoscope.

<sup>4</sup> IUCD = intrauterine contraceptive device.

5 Flip charts or leaflets.

Uniquely among temporary FP methods, the IUCD requires a pelvic examination before insertion. In addition, a physical examination may occasionally be helpful to evaluate problems with other methods or simply for routine check-ups that are unrelated to the use of FP methods. The 2014 BHFS assessed the presence of an examination bed or couch and an examination light, items that are needed to conduct a quality examination (particularly a pelvic examination) for FP clients. The majority of facilities that offer modern FP services had an examination bed or couch (77 percent), and half of facilities had an examination light. The CCs were least likely to have either an examination bed (73 percent) or an examination light (40 percent).

Visual aids also are important in good FP counseling. On the day of the assessment, samples of FP methods were available in the service delivery areas of 67 percent (76 percent excluding CCs) of facilities that offer modern FP methods. About one-third (51 percent excluding CCs) of facilities had a model for demonstrating condom use and around one-fifth (42 percent excluding CCs) had a pelvic model to use during discussions of the IUCD.

### 5.3.2 Availability of Infection Control items

The 2014 BHFS assessed the presence of items for infection control in areas where FP procedures such as pelvic examinations for IUCD insertions and the provision of implants and injectables—most often take place. Items assessed for infection control were hand-washing supplies (running water and soap or hand disinfectant), latex gloves, a sharps container, and a waste receptacle. Gloves and a sharps container were seen in the FP service areas in the majority of facilities that offer modern FP methods (66 percent and 64 percent, respectively). More than half of the facilities (55 percent) also had soap and running water or alcohol-based hand disinfectant (Table 5.6 and Figure 5.3).

Table 5.6 and Figure 5.3 also show that overall, 40 percent (52 percent excluding CCs) of facilities that offer modern FP methods had at least four items for infection control. The likelihood that at least four infection control items were present at the service site varies markedly by facility type. A majority of district and upazila level public facilities (80 percent), private hospitals (84 percent), and NGO facilities (79 percent) had at least four of the six items for infection control in the area where FP services were delivered. In contrast, less than half of union level public facilities (42 percent) and one in three CCs (34 percent) had at least four infection control items.

#### Table 5.6 Items for infection control during provision of family planning

Among facilities that offer any modern family planning methods, the percentages with indicated items for infection control observed to be available at the service site on the day of the survey, by background characteristics, Bangladesh HFS 2014

		Percentag	ge of facilities	offering any m	odern family pla	nning metho	ods that have	items for infect	ion control		Number of
Background characteristics	Soap	Running water <sup>1</sup>	Soap and running water	Alcohol- based hand disinfectant	Soap and running water or else alcohol- based hand disinfectant	Latex gloves <sup>2</sup>	Sharps container	Waste receptacle <sup>3</sup>	All 6 items available*	At least four items available	facilities offering any modern family planning methods
Facility type											
District and upazila public facilities DH MCWC UHC	<b>92.9</b> 91.9 93.3 92.9	<b>91.9</b> 91.9 89.9 92.3	<b>88.6</b> 89.2 87.6 88.7	<b>61.6</b> 64.9 59.6 61.8	<b>90.9</b> 91.9 92.1 90.6	<b>87.1</b> 86.5 84.3 87.8	<b>75.4</b> 78.4 78.7 74.4	<b>62.5</b> 70.3 52.8 63.9	<b>39.0</b> 32.4 32.6 40.9	<b>79.8</b> 89.2 78.7 79.2	<b>45</b> 3 7 34
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>80.6</b> 77.8 85.4 78.5	<b>60.9</b> 58.6 66.9 56.2	<b>57.7</b> 54.6 65.6 51.6	<b>33.5</b> 32.3 30.6 40.8	<b>66.9</b> 62.8 72.7 66.0	<b>64.5</b> 65.1 70.3 53.8	<b>50.3</b> 54.5 46.6 47.2	<b>28.7</b> 31.2 25.6 28.5	<b>12.4</b> 14.2 9.8 12.6	<b>41.6</b> 37.6 48.7 38.2	<b>312</b> 139 108 65
Public community clinic (CC)	76.5	37.8	34.8	28.3	44.7	64.2	67.8	22.5	12.1	33.6	825
NGO clinic/ hospital	92.3	91.8	89.2	68.2	91.2	83.2	78.6	65.1	46.2	79.0	72
Private hospital	78.5	92.2	78.5	75.6	89.3	63.8	68.6	84.2	44.2	84.2	7
<b>Location</b> Urban Rural	92.2 77.9	91.4 45.4	88.4 42.2	69.4 30.4	91.6 51.7	81.2 65.0	76.8 63.4	68.5 25.0	45.2 12.8	80.4 36.8	94 1,166
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	86.5 63.7 74.9 72.9 93.9 88.6 87.1	35.9 35.6 51.3 50.6 48.7 66.5 49.2	32.9 31.8 45.4 50.1 48.5 62.0 48.7	31.1 27.5 31.6 23.1 43.8 50.9 20.2	44.2 48.6 53.8 51.2 54.8 70.1 59.8	55.1 60.8 71.6 49.3 65.4 84.6 72.5	70.9 47.7 73.0 53.1 67.8 73.2 71.8	30.2 17.9 35.3 22.1 23.3 37.5 33.3	15.4 3.5 15.1 16.3 14.8 34.0 4.9	29.4 25.2 47.1 23.1 49.9 57.3 48.6	103 238 282 185 169 193 91
Total Total excluding CCs	79.0 83.7	48.8 69.7	45.7 66.4	33.3 <i>4</i> 2.8	54.7 73.7	66.2 <i>69.9</i>	64.4 57.8	28.2 <i>39.1</i>	15.2 2 <i>1.</i> 2	40.1 <i>52.4</i>	1,260 <i>43</i> 5

<sup>1</sup> Piped water, water in bucket with specially fitted tap, or water in pour pitcher.

<sup>2</sup> Non-latex equivalent gloves are acceptable.

<sup>3</sup> Waste receptacle with plastic bin liner.

\* The facility had the following six infection control items: soap, running water, alcohol-based hand disinfectant, latex gloves, sharps container, and waste receptacle

# *Figure 5.3* Availability of at least four\* standard precaution items for infection control in family planning service area, by facility type



\* The facility had at least four out of the following six infection control items: soap, running water, alcohol-based hand disinfectant, latex gloves, sharps container, and waste receptacle

# 5.4 READINESS TO PROVIDE FAMILY PLANNING SERVICES

The WHO has specified a set of items or tracer indicators that facilities must have to be considered ready to offer FP services (WHO 2013, Service Availability and Readiness Assessment). In this section of the report, data from the 2014 BHFS were used to construct a slightly less restrictive and a Bangladesh-context-appropriate measure of FP service readiness. The following six items/indicators are included in this measure of the readiness of health facilities to provide FP services:

- Trained staff. At least one staff person who ever received in-service FP training.
- Guidelines. National or any other FP guidelines.
- Equipment. Blood pressure apparatus.
- Commodities. Oral pill, injectables, and condom.

Table 5.7 shows that only one in four (40 percent excluding CCs) of facilities that offer modern FP methods can be considered ready to provide quality FP services, i.e., all six items or tracer indicators included in the FP service readiness measure were available at the facility on the day of the survey.

Examining service readiness by facility type shows that, while over 90 percent of district and upazila level public facilities and almost 90 percent of NGO facilities offer modern FP methods, only a little more than half of these facilities can be considered ready to provide quality FP services (Table 5.7 and Figure 5.5). In the public sector, CCs are the least likely to be ready to provide FP services, primarily because large proportions of CCs lack trained staff and guidelines and are also somewhat less likely to have commodities, especially injectables, available than other public facilities. Private hospitals are the least engaged in providing FP services, and are the least ready to provide quality services; only 5 percent of private hospitals that offer FP can be considered ready to provide quality FP services.

#### Table 5.7 Readiness of health facilities to provide family planning services

Among facilities that offer any modern family planning methods, the percentage with family planning guidelines, the percentage with at least one staff member recently trained on family planning service delivery, the percentage with the indicated contraceptive commodities available on the day of the survey, and the percentage with all items, by background characteristics, Bangladesh HFS 2014

		Percentage of	facilities offer	ing any modern	family plannir	ng and having	<b>j</b> :	Number of facilities
Background characteristics	Guidelines on family planning <sup>1</sup>	Staff trained in family planning any time <sup>2</sup>	Blood pressure apparatus <sup>3</sup>	Combined or progestin only oral pills	Combined or progestin only injectable	Male condom	All 6 items available	offering any modern family planning methods
Facility type								
District and upazila public facilities DH MCWC UHC	<b>75.2</b> 83.8 76.4 74.2	<b>82.1</b> 73.0 93.3 80.5	<b>96.8</b> 94.6 94.4 97.5	<b>97.4</b> 94.6 97.8 97.5	<b>94.2</b> 91.9 95.5 94.2	<b>96.5</b> 94.6 98.9 96.2	<b>56.0</b> 51.4 64.0 54.6	<b>45</b> 3 7 34
Union level public facilities	58.5	68.5	85.2	91.2	90.5	94.5	35.6	312
UHFWC UHFWC (upgraded) USC/RD	60.0 58.3 55.5	71.6 71.1 57.7	83.2 86.3 87.8	90.7 92.6 90.0	91.2 92.7 85.3	95.3 96.2 90.1	35.1 37.4 33.7	139 108 65
Public community clinic (CC)	49.2	50.4	83.4	86.9	73.2	89.7	17.3	825
NGO clinic/hospital	78.0	76.9	97.4	91.3	86.8	91.9	53.2	72
Private hospital	36.4	28.8	84.4	44.0	42.1	34.3	5.0	7
<b>Location</b> Urban Rural	71.3 52.6	73.7 56.1	95.8 84.3	90.7 88.1	90.1 77.9	90.9 90.9	50.4 23.1	94 1,166
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	57.8 50.4 50.8 49.9 53.6 66.1 52.5	55.3 61.0 70.2 49.7 45.9 49.8 63.7	78.3 85.4 77.9 90.9 84.9 95.9 80.9	93.4 88.7 84.0 88.9 89.5 88.3 92.1	86.1 81.3 61.6 77.8 79.2 95.3 83.5	92.6 87.5 84.3 91.2 94.8 99.5 92.3	23.8 27.4 24.6 19.1 18.8 35.0 25.6	103 238 282 185 169 193 91
Total	54.0	57.4	85.1	88.3	78.8	90.9	25.1	1,260
Total excluding CCs	63.0	70.6	88.4	91.1	89.4	93.3	40.1	435

Note: The measures presented in the table on guidelines for family planning and staff trained in FP comprise the staff and training domains, and blood pressure apparatus the equipment domain, for assessing readiness to provide family planning services within the health facility assessment methodology proposed by WHO and USAID (2012).

<sup>1</sup> National guidelines or any other guidelines on family planning. <sup>2</sup> The facility had at least one interviewed staff member providing the service who reports receiving in-service training in some aspect of family planning. The training must involve structured sessions, and does not include individual instruction that a provider might have received during routine supervision. <sup>3</sup> A functioning digital blood pressure apparatus or else a manual sphygmomanometer with a stethoscope.





*Figure 5.5* Readiness of health facilities to provide family planning services, by facility type



Note: Readiness of facilities to provide family planning services: Trained staff (at least one staff member who ever received in-service training on FP), guidelines (national or any other guidelines on FP), equipment (blood pressure apparatus), commodoties (oral pill, injectables, condom)

BHFS 2014

## 5.5 BASIC MANAGEMENT AND ADMINISTRATIVE SYSTEMS

### 5.5.1 Training and Supervision

Regular training for providers aims to improve and sustain the quality of counseling, the management of complications or side effects, and the providers' judgment and skills in assessing which contraceptive methods are most suitable for individual clients. Supervision of individual staff members helps to promote adherence to standards and to identify problems that contribute to poor services.

Family planning providers were much less likely to report having received any recent in-service training. Only around 3 in 10 providers (22 percent excluding providers at CCs) reported that they had received in-service FP training in the 24 months before the BHFS (Table 5.8).

With the low percentage of providers that reported training, only 28 percent of providers at all facilities (21 percent excluding providers at CCs) had received both components of supportive management (training and supervision) recently. Health care providers at CCs and NGO facilities were most likely to have received both in-service training and supervision recently.

Table 5.8 shows that regular supervision of FP providers is common; 94 percent of the providers interviewed in the BHFS who reported providing FP services received personal supervision in the six months before the assessment. Providers at USC/RDs were the least likely to have received recent supervision (86 percent).

Table 5.8 Supportive management	nt for providers of family	planning services		
Among interviewed family planning personal supervision during the sp				
	Percentage o	f interviewed providers	who received:	
Background characteristics	Training related to family planning during the 24 months preceding the survey <sup>1</sup>	Personal supervision during the 6 months preceding the survey <sup>2</sup>	Training related to family planning during the 24 months and personal supervision during the 6 months preceding the survey	Number of interviewed providers of family planning services
Facility type				
District and upazila public facilities DH MCWC UHC	<b>17.3</b> 18.7 24.9 15.3	<b>95.0</b> 95.7 97.2 94.4	<b>16.2</b> 18.1 24.0 14.1	<b>240</b> 30 39 172
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>21.9</b> 25.3 19.9 17.6	<b>91.1</b> 91.4 93.3 85.9	<b>20.1</b> 24.2 17.7 14.4	<b>604</b> 274 221 109
Public community clinic (CC)	35.1	95.2	34.4	1,400
NGO clinic/hospital	27.2	94.6	26.2	253
Private hospital	23.2	90.3	23.2	24
<b>Location</b> Urban Rural	22.1 30.7	93.8 94.2	21.2 29.7	399 2,121
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	30.0 32.1 32.5 23.1 20.2 25.3 45.4	89.0 92.8 95.4 95.7 94.9 96.4 89.1	27.8 31.6 31.4 23.1 19.6 24.7 40.3	199 489 724 381 282 298 148
Total	29.3	94.1	28.3	2,520
Total excluding CCs	22.1	92.7	20.7	1,120

<sup>1</sup> Training refers only to in-service training. The training must have involved structured sessions, and does not include individual instruction that a provider might have received during routine supervision.
<sup>2</sup> Personal supervision refers to any form of technical support or supervision from a facility-based supervisor or from a visiting

<sup>2</sup> Personal supervision refers to any form of technical support or supervision from a facility-based supervisor or from a visiting supervisor. It may include, but is not limited to, review of records and observation of work, with or without the provision of any feedback to the health worker.

## 5.5.2 In-service Training by Topic

Table 5.9 presents information on specific in-service training that providers of FP services reported that they received at any time and within 24 months of the survey. The results show that providers most often received training in FP counseling and postpartum methods. More than half of FP providers (57 percent excluding providers at CCs) had ever received in-service training on FP counseling, but only 22 percent of providers (14 percent excluding providers at CCs) received this training within 24 months of the survey. More than two-fifths of providers (46 percent excluding providers at CCs) had received in-service training service on post-partum FP, although only 15 percent of providers (11 percent excluding providers at CCs) had received in-service training in post-partum FP during the 24 months before the survey.

The FP providers were slightly more likely to have ever received training on FP-related clinical issues (32 percent) and on the insertion/removal of the IUCD (29 percent of providers at all facilities) than the insertion/removal of implants (20 percent). Fewer than half of the providers who ever received in-service training in these areas received the training in the 24 months before the survey.

In general, the results in Table 5.9 show that providers at CCs and private hospitals are less likely than providers at other types of facilities to have ever received in-service training in any of the areas.

Table 5.9 Training for family planning service providers

Among interviewed family planning service providers, the percentages who report receiving in-service training on topics related to family planning during the specified time periods preceding the survey, by background

					Per	ercentage	centage of providers of FP	rs of FP s	ervices wh	no report r	services who report receiving in-service training on:	1-service ti	aining on:						
	Counseling on FP	eling -P	FP-related clinical issues <sup>1</sup>	lated ssues <sup>1</sup>	Insertion/ removal of IUCD <sup>2</sup>	tion/ of IUCD <sup>2</sup>	Insertion/ removal of implant	tion/ /al of ant	FP for HIV+ clients	HIV+ its	Post-partum FP	um FP	Perform vasectomy	my My	Perform tubal legation	tubal on	Emergency contraception	tency eption	Number of
Background	During the past 24	At any	During the past 24	At any	During the past 24	At any	During the past 24	At any	During the past 24	At any	During the past 24	At any	During the past 24	At any	During the past 24	At any	During the past 24	At any	interviewed providers of family planning
District and upazila public facilities DH MCWC UHC	<b>10.2</b> 17.2 8.2	<b>51.7</b> 46.7 72.2 48.0	<b>5.3</b> 6.5 10.5 4.0	<b>41.4</b> 39.7 58.4 37.8	<b>5.7</b> 9.9 3.7	<b>42.5</b> 42.7 62.2 38.0	<b>5</b> 0.0 0 0.0 0 0.0 0.0 0.0	<b>36.3</b> 38.0 32.9	<b>2.5</b> 3.8 4.7 1.7	<b>17.7</b> 25.5 22.4 15.4	6.9 9.6 5.3 5.3	<b>43.9</b> 41.7 64.9 39.5	<b>3.4</b> 3.8 6.4 2.7	<b>26.7</b> 32.5 37.6 23.2	<b>3.7</b> 5.8 8.0 2.4	26.3 26.3 26.3 26.3	<b>4.0</b> 6.7 7.7 6.7 7.0 6.4	<b>41.5</b> 36.9 63.5 37.3	<b>240</b> 30 39 172
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>13.2</b> 13.8 9.3	<b>59.2</b> 57.2 64.0 54.4	<b>8.7</b> 10.5 7.6	<b>36.9</b> 39.1 33.3	<b>7.8</b> 10.2 6.7 4.1	<b>41.3</b> 39.7 47.9 32.2	<b>3.2</b> 3.6 3.6	<b>16.6</b> 16.8 16.7	<b>3.3</b> 3.8 1.0	<b>13.4</b> 13.9 10.7 17.8	<b>10.5</b> 11.5 9.6 10.1	<b>46.3</b> 46.6 44.1	<b>1.7</b> 2.4 1.0	<b>12.0</b> 8.8 1.14.8	<b>1.9</b> 2.8 1.0 1.0	<b>14.3</b> 15.5 14.8 10.1	<b>7.8</b> 6.0 5.9	<b>43.2</b> 46.3 41.4 39.0	<b>604</b> 274 221
Public community clinic (CC)	28.2	51.8	14.3	27.0	8.4	18.8	10.1	17.3	4.3	7.9	18.1	37.2	5.4	9.6	5.9	10.1	14.1	33.8	1,400
NGO clinic/hospital	19.0	57.8	13.6	39.6	15.2	43.3	11.7	24.9	4.9	12.9	16.1	48.4	8.3	19.6	9.8	20.2	11.9	44.4	253
Private hospital	14.0	30.5	22.1	29.9	20.6	40.4	14.2	40.4	20.6	21.5	23.2	38.1	0.0	15.7	6.3	15.7	22.1	37.5	24
Location Urban Rural	14.5 23.3	50.8 54.6	10.9 12.3	39.2 30.7	11.6 8.2	41.2 26.8	9.3 8.0	31.2 17.8	5.4 3.9	16.2 9.8	11.9 15.7	43.6 40.7	6.0 4.2	24.2 10.7	7.2 4.8	25.8 11.9	9.8 11.9	42.2 37.1	399 2,121
<b>Division</b> Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	23.9 26.0 15.3 38.6 38.6	54.7 57.1 62.5 41.7 48.6 45.1 60.7	7.2.2 12.2.0 12.5 12.9 12.4 12.4	23.6 32.1 32.1 28.1 16.1 25.9 25.9	4.7 10.0 16.9 16.9	20.9 35.0 25.3 24.8 34.3 34.3	5.6 6.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7	15.7 25.5 15.1 12.2 22.1	5.6 5.5 1.9 1.9 1.0	101 101 101 101 101 101 101 101 101 101	17.3 18.8 17.4 10.9 13.1 22.5	40.7 44.1 36.5 30.1 33.9 43.4	3.000800 0.00803 0.00800	9.6 15.1 17.4 7.5 6.7 6.7 0.9	4 0 - 2 0 4 0 6 	9.3 16.4 14.4 7.1 7.1 12.0	6.7 14.6 12.4 7.6 8.6 20.3	26.1 26.1 32.1 32.2 32.2 2.3 2.9 2.3 32.9	199 724 381 288 288 298 298
Total Total evolution CCs	21.9 13.0	54.0	12.1	32.1 38 3	8.8 0 3	29.1 42.0	8.2 8.2	20.0	4.4 αα	10.8 14.4	15.1 11 2	41.2 46.1	4.5 2.5	12.9 16 a	5.2	14.1	11.5 8.4	37.9 43.0	2,520 1 120
Note: Training refers only to in-service training. The training must have involved structured sessions, and does not include individual instruction that a provider might have received during routine supervision.	in-service tr	aining. TI	he training	must hav	e involved	structure	d sessions	, and doe:	s not incluc	de individu	ual instruct	ion that a	provider m	ight have	received o	Juring rot	utine supe	rvision.	
$^{2}$ IUCD = intrauterine contraceptive device.	eptive devi	ce.	ט וווווושט עו					ŝ											
## **Key Findings**

- More than 97 percent of health facilities in Bangladesh offer antenatal care (ANC) services.
- Among facilities that offer ANC services, only 16 percent offer tetanus toxoid vaccine when ANC services are offered.
- Half of facilities that offer ANC services had at least one staff member who had ever received in-service training related to ANC and half had ANC guidelines on the day of assessment.
- Among facilities that offer ANC services, 12 percent can test for hemoglobin, 19 percent for urine protein, and 18 percent for urine glucose.
- Fifty-five percent of facilities that offer ANC services had hand-washing supplies for infection prevention available at the service site on the day of the assessment.
- Twenty-two percent of interviewed ANC providers had received in-service training related to ANC during the 24 months preceding the survey, and nine in ten had received personal supervision in the six months preceding the survey.
- Only four percent of facilities are ready to provide quality ANC services according to the World Health Organization (WHO) criteria.

# 6.1 BACKGROUND

ntenatal care (ANC) is the gateway for many critical maternal, newborn, and child health care services. Antenatal care is also often the first opportunity for a woman and her family to interact with the health system. The provision of ANC by a medically trained provider is intended to monitor the status of a pregnancy, identify the complications associated with the pregnancy, and prevent adverse pregnancy outcomes. To be most effective, there should be regular ANC throughout pregnancy.

The 2014 Bangladesh Demographic and Health Survey (BDHS) found that a majority (64 percent) of women age 15-49 with a live birth in the three years preceding the survey received ANC from a medically trained provider. This represented an increase of nine percentage points from the level reported in the 2011 BDHS (55 percent). While the upward trend in ANC coverage is encouraging, only 31 percent of women had the recommended four or more ANC visits during the last pregnancy (NIPORT et al. 2015). Clearly, Bangladesh lags far behind in reaching the Health, Population and Nutrition Sector Development Program (HPNSDP) target of 50 percent of pregnant women completing at least four ANC visits by 2016 (PMMU 2012). The gap between the HPNSDP target and the percentage actually receiving regular ANC care is especially marked in rural areas. The BDHS showed that only 26 percent of rural women, as compared to 46 percent of urban women, had at least four ANC visits.

Data from the 2014 BHFS related to the delivery of ANC services will be useful in the continuing efforts to improve ANC care. This chapter explores the results from the BHFS in the following key areas related to the provision of ANC services at health facilities in Bangladesh:

• Availability of ANC services. Section 6.2, including Tables 6.1 through 6.5 and Figures 6.1 and 6.2, examines the availability of ANC services at health facilities, including the availability of basic amenities and equipment, diagnostic capacity, essential medicines, and infection control processes.

- **Readiness of health facilities to provide ANC services.** Section 6.3, including Table 6.6 and Figures 6.3 and 6.4, addresses the readiness of facilities to provide quality ANC services.
- **Basic management and administrative systems.** Section 6.4, including Tables 6.7 and 6.8, considers supervision and recent in-service training of providers that support quality services.

#### 6.2 AVAILABILITY OF ANC SERVICES

#### 6.2.1 ANC Service Provision

Almost all facilities in Bangladesh (97 percent) offer ANC services (95 percent excluding community clinics (CCs)). Among private hospitals, which are the least likely to provide ANC services, eight in ten facilities offer ANC services (Table 6.1 and Figure 6.1).

Eighty-four percent (83 percent excluding CCs) of facilities that provide ANC services offer the service during all working days in a week. Almost all district and upazila public facilities (95 percent) and NGO facilities (94 percent) offer ANC services this frequently. Union level public facilities are the least likely to provide ANC services on all working days (79 percent). Facilities that offer ANC services in urban areas (92 percent) are more likely to offer ANC services during all working days in a week than those in rural areas (84 percent). The proportion of facilities that offer ANC services on all working days varies by region from 81 percent in Sylhet to 91 percent in Rangpur.

Not all of the facilities that offer tetanus toxoid (TT) vaccinations provide the service on all days that ANC services are available in the facility. While about a third of facilities that offer ANC services provide TT vaccination services, only 16 percent offer TT vaccine on all days that ANC services are available in the facility. District and upazila public facilities are the more likely to offer TT vaccine on all days that ANC services are offered (42 percent), followed by NGO facilities (36 percent), private hospitals (22 percent), CCs (15 percent), and union-level public facilities (11 percent). Among public facilities, the highest proportions that offer TT vaccinations on all days that ANC services are available were observed at DH (56 percent) and UHC (45 percent). The Maternal and Child Welfare Centers (MCWCs) are less likely to offer TT vaccine on all days that ANC services are available than other district and upazila public facilities (23 percent).

#### Table 6.1 Availability of antenatal care services

Among all facilities, the percentage that offer antenatal care (ANC) services and, among facilities that offer ANC services, the percentages that offer the service on the indicated number of days per week, and the percentages that offer tetanus toxoid (TT) vaccinations on the indicated number of days per week by background characteristics, Bangladesh HFS 2014

	Percentage of		Percentage offering ANC services are indicate	where ANC offered on	Percentage offering ANC v toxoid vaccine indicate	vhere tetanus is offered on	Number of
Background characteristics	facilities that offer ANC	Number of facilities	Provides but not everyday <sup>1</sup>	Provides everyday <sup>1</sup>	Provides but not everyday <sup>2</sup>	Provides everyday <sup>2</sup>	facilities offering ANC
Facility type							
District and upazila public facilities DH MCWC UHC	<b>99.1</b> 98.4 100.0 99.0	<b>47</b> 5 8 35	<b>5.0</b> 3.3 12.0 3.8	<b>95.0</b> 96.7 88.0 96.2	<b>20.3</b> 19.7 18.5 20.8	<b>42.4</b> 55.7 22.8 44.7	<b>47</b> 5 8 34
Union level public facilities UHFWC UHFWC (Upgraded) USC/RD	<b>95.3</b> 98.2 99.0 87.3	<b>374</b> 149 117 108	<b>21.0</b> 22.3 19.3 21.1	<b>79.0</b> 77.7 80.7 78.9	<b>14.2</b> 10.6 21.4 10.7	<b>11.4</b> 15.7 7.8 9.1	<b>356</b> 146 116 94
Public community clinic (CC)	98.8	1,010	15.3	84.7	18.3	15.2	997
NGO clinic/hospital	97.9	81	6.5	93.5	26.2	36.3	79
Private hospital	78.5	36	13.8	86.2	20.9	22.3	28
<b>Location</b> Urban Rural	92.7 97.8	130 1,418	8.0 16.5	92.0 83.5	22.7 17.4	36.5 14.7	121 1,387
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	98.8 97.4 96.7 94.5 98.9 98.8	116 287 421 197 224 205 97	12.8 13.9 17.5 20.4 18.3 8.7 18.8	87.2 86.1 82.5 79.6 81.7 91.3 81.2	11.2 16.5 25.6 20.9 8.6 10.8 26.1	22.6 16.6 12.5 28.4 15.5 16.6 2.8	115 280 412 191 212 203 96
Total	97.4	1,548	15.9	84.1	17.9	16.4	1,508
Total excluding CC	94.9	538	16.9	83.1	17.0	18.7	511

<sup>1</sup> Everyday refers to all working days when the facility is open.

<sup>2</sup> Everyday means TT vaccine is available on all days that ANC services are available in the facility.



Figure 6.1 Availability of ANC services in health facilities, by facility type

Total facilities excluding CCs (N = 538) Total facilities including CCs (N = 1,548) BHFS 2014

# 6.2.2 Availability of ANC Guidelines, Trained Staff, and Equipment

Availability of ANC service guidelines, appropriately trained providers, and certain supplies and equipment, such as those for infection control, contribute to the provision of quality services. In addition, the capacity to perform basic diagnostic tests and offer routinely dispensed medicines enhances the service.

Fifty percent (53 percent excluding CCs) of facilities that offer ANC services had guidelines on ANC at the service site on the day of the survey (Table 6.2). Among the different facility types, district and upazila public facilities (70 percent) and NGO facilities (73 percent) are more likely to have ANC guidelines compared with either union level public facilities or CCs (each at 48 percent). Availability of ANC guidelines is lowest in private hospitals (25 percent). Urban facilities (61 percent) are more likely than rural facilities (49 percent) to have ANC guidelines. Facilities in Dhaka and Chittagong (40 percent, 39 percent respectively) are comparatively less likely than those in other divisions to have ANC guidelines. This can be attributed to the higher concentration of private facilities in these divisions.

The BHFS also obtained information on whether facilities have a provider who received in-service ANC training. Results show that about half of facilities that offer ANC services have at least one staff person who has ever received ANC in-service training. District and upazila public facilities (84 percent) and NGO facilities (60 percent) are more likely to have providers who have ever received ANC in-service training than union level public facilities (50 percent), CCs (46 percent), and private hospitals (28 percent) (Table 6.2).

For equipment that might be used during physical examination, the great majority of all facilities that offer ANC services had a stethoscope (92 percent), blood pressure apparatus (87 percent), adult weighing scale (83 percent), and an examination bed or couch (78 percent). Fewer had a measuring tape (36 percent) or fetal stethoscope (15 percent). The NGO facilities, district and upazila public facilities, and private hospitals are more likely to have the previous items than union level facilities and CCs (Table 6.2).

#### Table 6.2 Guidelines, trained staff, and basic equipment for antenatal care services

Among facilities that offered antenatal care (ANC) services, the percentage having guidelines, at least one staff member recently trained on ANC service delivery, and the indicated equipment observed to be available on the day of the survey, by background characteristics, Bangladesh HFS 2014

		ge of facilitie NC that hav				Equip	ment			
Background characteristics	Guidelines on ANC <sup>1</sup>	Staff trained for ANC during the past 24 months <sup>2</sup>	Staff trained for ANC at anytime <sup>2</sup>	Blood pressure apparatus <sup>3</sup>	Stetho- scope	Adult weighing scale	Fetal stetho- scope	Measuring tape <sup>4</sup>	Exami- nation bed or couch	Number of facilities offering ANC
Facility type										
District and upazila public facilities DH MCWC UHC	<b>70.3</b> 72.1 70.7 70.0	<b>38.1</b> 54.1 39.1 35.6	<b>83.6</b> 85.2 83.7 83.4	<b>97.7</b> 98.4 92.4 98.8	<b>98.9</b> 98.4 94.6 100.0	<b>88.5</b> 91.8 89.1 87.9	<b>46.0</b> 50.8 50.0 44.4	<b>60.8</b> 72.1 64.1 58.3	<b>95.0</b> 96.7 96.7 94.4	<b>47</b> 5 8 34
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>47.8</b> 52.5 47.6 40.8	<b>15.3</b> 16.5 15.6 13.1	<b>50.0</b> 53.6 53.7 40.0	<b>85.4</b> 86.6 81.3 88.7	<b>91.0</b> 91.2 88.0 94.4	<b>76.6</b> 76.3 85.6 65.8	<b>19.0</b> 16.7 23.2 17.3	<b>35.4</b> 35.1 41.3 28.5	<b>79.3</b> 81.2 86.1 67.9	<b>356</b> 146 116 94
Public community clinic (CC)	48.2	31.3	46.3	85.5	91.2	84.2	8.5	32.7	74.1	997
NGO clinic/hospital	72.9	24.1	60.4	98.3	99.1	94.1	44.3	63.3	95.4	79
Private hospital	24.7	12.1	27.5	94.7	98.0	83.8	43.3	52.6	95.2	28
<b>Location</b> Urban Rural	61.4 48.6	23.4 27.3	55.9 48.1	96.9 85.8	98.2 91.4	90.0 82.4	46.4 11.9	59.4 34.2	94.3 76.1	121 1,387
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	56.3 38.5 39.9 58.5 46.9 70.7 60.1	22.9 38.5 30.4 18.4 16.0 20.9 38.4	38.5 57.2 57.8 44.3 35.9 39.5 54.3	83.0 84.1 84.3 93.8 83.8 96.1 81.7	89.8 86.3 92.1 96.7 93.7 96.1 88.0	86.7 86.1 70.5 90.3 84.2 91.1 89.5	11.6 7.0 15.7 12.0 8.1 29.1 25.9	41.2 27.5 33.4 40.8 32.4 50.4 36.3	72.5 74.2 70.1 85.2 77.7 86.1 91.4	115 280 412 191 212 203 96
Total	49.6	27.0	48.7	86.7	91.9	83.0	14.7	36.2	77.5	1,508
Total excluding CCs	52.5	18.6	53.5	89.1	93.4	80.8	26.7	43.0	84.1	511

Note: The guidelines for ANC and staff trained in ANC comprise the training domain and the blood pressure apparatus indicator comprises the equipment domain, for assessing readiness to provide ANC services within the health facility assessment methodology proposed by WHO and USAID (2012).

<sup>1</sup> National ANC guidelines or other guidelines relevant to antenatal care.

<sup>2</sup> Facility has at least one interviewed staff member providing ANC services who reports receiving in-service training in some aspect of antenatal care. The training must have involved structured sessions, and does not include individual instruction that a provider might have received during routine supervision.

<sup>3</sup> Functioning digital blood pressure apparatus or a functioning manual sphygmomanometer and a stethoscope.

<sup>4</sup> For measuring fundal height.

#### 6.2.3 Availability of Laboratory Diagnostic Tests

Performing basic laboratory tests onsite saves time for both the client and the provider. This also makes it much more likely that the client receives the test results and the provider can act on them. Table 6.3 shows the availability of five basic laboratory tests that are important in the delivery of quality ANC services: hemoglobin, urine protein, urine glucose, blood grouping and Rhesus factor, and syphilis. In general, the basic laboratory tests important in ANC are lacking in most facilities that offer ANC services. The proportion of facilities that offer ANC and conduct the various tests ranges from a low of one percent (two percent excluding CCs) with the capacity to do blood grouping and Rhesus factor to a high of 19 percent (31 percent excluding CCs) with the capacity for urine protein testing. In almost all cases, DHs, UHCs, NGO facilities, and private hospitals that offer ANC services are much more likely than lower level public facilities to have the capacity to conduct the tests.

#### Table 6.3 Diagnostic capacity

Among facilities that offer antenatal care (ANC) services, the percentages with the capacity to conduct the indicated tests in the facility, by background characteristics, Bangladesh HFS 2014

	Pe	ercentage of facilities	s offering ANC that h	ave the indicated tes	sts	
Background characteristics	Hemoglobin <sup>1</sup>	Urine protein <sup>2</sup>	Urine glucose <sup>3</sup>	Blood grouping and Rhesus factor <sup>4</sup>	Syphilis⁵	Number of facilities offering ANC
Facility type						
District and upazila public facilities DH MCWC UHC	<b>70.2</b> 96.7 28.3 75.6	<b>68.1</b> 86.9 33.7 73.0	<b>66.4</b> 88.5 32.6 70.6	<b>6.6</b> 18.0 0.0 6.4	<b>41.5</b> 80.3 7.6 43.3	<b>47</b> 5 8 34
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>7.9</b> 10.7 3.6 8.8	<b>12.0</b> 13.2 10.1 12.5	<b>7.8</b> 9.5 4.7 9.0	<b>0.0</b> 0.0 0.0 0.0	<b>1.4</b> 2.4 0.0 1.5	<b>356</b> 146 116 94
Public community clinic (CC) NGO clinic/hospital	3.6 69.3	12.3 75.1	12.9 76.3	0.0 6.0	0.7 40.3	997 79
Private hospital	87.2	78.5	80.5	6.6	72.7	28
<b>Location</b> Urban Rural	72.5 6.4	73.4 13.8	73.3 13.1	5.1 0.3	47.7 1.9	121 1,387
<b>Division</b> Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	7.6 10.5 13.5 5.1 9.6 19.9 13.1	8.5 16.8 21.0 12.4 18.6 27.0 18.9	9.7 20.0 16.7 12.6 15.5 30.5 16.9	0.1 0.9 1.3 0.5 0.2 0.2 0.0	1.5 5.4 8.2 3.1 4.3 6.6 4.3	115 280 412 191 212 203 96
Total	11.7	18.5	17.9	0.6	5.5	1,508
Total excluding CCs	27.5	30.6	27.9	1.9	15.0	511

Note: The hemoglobin and urine protein measures presented in the table comprise the diagnostics domain for assessing readiness to provide ANC services within the health facility assessment methodology proposed by WHO and USAID (2012).

<sup>1</sup> Capacity to conduct any hemoglobin test in the facility.

<sup>2</sup> Dip sticks for urine protein.

<sup>3</sup> Dip sticks for urine glucose.

<sup>4</sup> Anti-A, anti-B, and anti-D reagents, plus an incubator, Coomb's reagent, and glass slides all present.

<sup>5</sup> Rapid test for syphilis or venereal disease research laboratory (VDRL) test or polymerase chain reaction (PCR) or rapid plasma reagin (RPR).

# 6.2.4 Availability of Medicines for Routine ANC

Some pregnant women should take iron supplements and/or folic acid to combat anemia and improve pregnancy outcomes. Table 6.4 reports the availability of these medicines which are essential for the provision of routine ANC services. As evident from the table, iron tablets and folic acid tablets are almost universally available in public and NGO facilities that offer ANC services. In contrast, only eight in 10 private hospitals that offer ANC have these medicines.

#### Table 6.4 Availability of medicines for routine antenatal care

Among facilities that offer antenatal care (ANC) services, percentages with essential medicines observed to be available on the day of the survey, by background characteristics, Bangladesh HFS 2014

_	Percentage c	of facilities offering AN	NC that have indic	ated medicines	Number of
Background			Combined iron	Iron or folic acid	facilities offering
characteristics	Iron tablets	Folic acid tablets	and folic acid	tablets	ANC
Facility type					
District and upazila					
public facilities	99.1	98.6	95.2	99.1	47
DH	100.0	95.1	95.1	100.0	5
MCWC	96.7	96.7	94.6	96.7	8
UHC	99.5	99.5	95.4	99.5	34
Union level public					
facilities	97.3	95.8	90.5	97.3	356
UHFWC	97.7	96.1	92.7	97.7	146
UHFWC (upgraded)	95.7	94.5	91.7	95.7	116
USC/RD	98.5	96.7	85.4	98.5	94
Public community clinic					
(CC)	95.4	93.5	87.5	95.4	997
NGO clinic/hospital	94.8	94.8	90.6	94.8	79
Private hospital	79.7	80.4	78.4	81.7	28
Location					
Urban	92.1	92.1	88.5	92.6	121
Rural	96.0	94.2	88.4	96.0	1,387
Division					
Barisal	98.4	98.4	97.0	98.4	115
Chittagong	93.2	92.0	84.9	93.2	280
Dhaka	95.7	92.8	84.3	95.9	412
Khulna	91.5	90.5	87.7	91.5	191
Rajshahi	97.2	96.8	92.8	97.2	212
Rangpur	100.0	100.0	93.6	100.0	203
Sylhet	94.7	88.0	86.8	94.7	96
Total	95.7	94.0	88.4	95.7	1,508
Total excluding CCs	96.1	95.0	90.3	96.2	511

provide ANC services within the health facility assessment methodology proposed by WHO and USAID (2012).

### 6.2.5 Availability of Infection Control items

Infection control is very important to the overall quality of ANC services. Table 6.5 and Figure 6.2 present information from the BHFS on the availability of running water and supplies for infection control at the site where ANC is provided. Just over half (72 percent excluding CCs) of facilities that offer ANC services have soap and running water or alcohol-based disinfectant. Sixty-three percent (65 percent excluding CCs) of facilities have latex gloves. Sixty-four percent (57 percent excluding CCs) of the facilities have a sharps container, although only 28 percent (38 percent excluding CCs) have a waste receptacle.

The likelihood that a facility has the items that are essential for infection control varies by facility type. For example, more than 90 percent of district and upazila public facilities, NGO facilities, and private hospitals that offer ANC services have soap and running water or alcohol-based disinfectant, while less than half of CCs have the items necessary for providers to clean their hands. The NGO facilities (81 percent) and district and upazila public facilities (78 percent) that offer ANC services are more likely to have latex gloves, as compared to union level facilities (59 percent), CCs (63 percent) and private facilities (68 percent).

#### Table 6.5 Items for infection control during provision of antenatal care

Among facilities that offer antenatal care (ANC) services, the percentages with indicated items for infection control observed to be available at the service site on the day of the survey, by background characteristics, Bangladesh HFS 2014

			Percenta	ge of facilities	offering ANC	that have it	ems for infect	tion control			
					Soap and						
					running						
					water or else						Number of
			Soap and	Alcohol-	alcohol-					At least 4	facilities
Background		Running	running		based hand	Latex	Sharps	Waste	All 6 items	items	offering
characteristics	Soap	water <sup>1</sup>	water		disinfectant	gloves <sup>2</sup>	container	receptacle <sup>3</sup>	available*	available	ANC
Facility type											
District and upazila public											
facilities	89.9	88.8	87.2	60.8	90.2	77.9	73.7	61.3	36.5	75.5	47
DH	90.2	91.8	88.5	62.3	90.2	72.1	73.8	65.6	34.4	78.7	5
MCWC	90.2	88.0	84.8	58.7	90.2	77.2	79.3	48.9	34.8	71.7	8
UHC	89.7	88.5	87.5	61.0	90.2	78.9	72.4	63.4	37.2	75.8	34
Union level public											
facilities	78.4	59.6	56.0	30.4	64.2	59.4	48.6	27.6	10.3	37.5	356
UHFWC	77.5	58.7	57.1	31.9	64.4	63.9	54.8	28.8	13.7	36.8	146
UHFWC											
(upgraded)	83.2	69.3	65.1	28.8	71.9	65.4	43.6	27.1	7.9	45.2	116
USC/RD	73.9	49.2	42.9	30.3	54.2	44.9	45.2	26.2	8.1	29.2	94
Public community	74.2	37.5	34.8	28.2	45.4	62.6	66.9	23.5	10.7	34.8	997
clinic (CC)	74.Z	37.5	34.0	20.2	43.4	02.0	66.8	23.5	10.7	34.0	997
NGO											
clinic/hospital	92.5	93.0	90.8	69.7	91.5	80.6	80.3	62.7	45.6	78.4	79
Private hospital	89.8	94.0	88.6	68.2	91.9	68.1	76.4	63.8	38.4	76.2	28
Location											
Urban	91.0	93.1	89.6	66.6	91.3	74.9	78.7	62.9	42.1	75.8	121
Rural	75.7	44.4	41.6	29.7	51.3	62.4	62.3	25.4	11.3	36.7	1,387
Division											
Barisal	84.1	37.8	35.2	33.5	45.5	56.0	74.0	32.0	17.8	33.1	115
Chittagong	66.1	34.4	31.3	31.3	50.9	64.1	56.0	18.0	6.0	29.3	280
Dhaka	69.9	47.0	42.4	29.2	49.0	62.9	65.0	35.1	11.4	41.1	412
Khulna	74.0	54.5	53.9	24.1	55.3	44.0	51.8	24.4	15.9	25.6	191
Rajshahi	87.3	47.6	46.5	40.7	52.7	60.5	61.5	21.8	11.2	47.4	212
Rangpur	89.8	69.6	65.6	47.1	74.4	83.8	75.9	37.3	32.2	57.9	203
Sylhet	86.3	50.4	49.7	19.6	59.9	73.9	69.4	30.0	4.7	45.8	96
Total	77.0	48.3	45.4	32.7	54.5	63.4	63.6	28.4	13.8	39.8	1,508
Total excluding CCs	82.3	69.4	66.1	41.4	72.3	64.9	57.4	38.1	19.8	49.5	511

<sup>1</sup> Piped water, water in bucket with specially fitted tap, or water in pour pitcher.

<sup>2</sup> Non-latex equivalent gloves are acceptable. Waste receptacle with plastic bin liner.

The facility had the following six infection control items: soap, running water, alcohol-based hand disinfectant, latex gloves, sharps container, and waste receptacle

Comparatively few sites that offer ANC have all the items that are essential for infection control at the site where ANC services are provided. Figure 6.2 shows that, overall, only 14 percent (20 percent excluding CCs) of facilities that offer ANC services have all six essential infection control items. The proportion with all six items is highest in NGO facilities (46 percent) and private hospitals (38 percent). With public facilities, just over one-third of district and upazila public facilities have all essential six items for infection control, as compared with one in ten union level facilities and CCs. The very limited availability of the infection control items in CCs and union level facilities that offer ANC may be the reason that urban facilities are four times as likely as rural facilities that offer ANC to have all the indicated infection control items (11 percent) (Table 6.5).

# *Figure 6.2* Availability of all six\* items of infection control for antenatal care services, by facility type



\*The facility had the following six infection control items: soap, running water, alcohol-based hand disinfectant, latex gloves, sharps container, and waste receptacle

# 6.3 READINESS OF HEALTH FACILITIES TO PROVIDE ANC SERVICES

The WHO has identified a set of items/tracer indicators that a facility needs in order to offer quality ANC services (WHO 2013, Service Availability and Readiness Assessment (SARA)). Data from the 2014 BHFS can be used to construct a slightly less restrictive and Bangladesh-context-appropriate version of the WHO-recommended service readiness measure for ANC. The measure requires all of the following six items/tracer indicators to be available for a health facility to be considered ready to offer quality ANC service:

- Trained staff. At least one provider of ANC ever receiving in-service ANC training.
- Guidelines. National or other ANC guidelines at the facility.
- Equipment. Blood pressure apparatus.
- Diagnostic capacity.
  - Hemoglobin test.
  - Urine protein test.
- Medicines. Iron or folic acid tablets.

Information on each of these items has been presented earlier in the chapter in the discussion of various service domains. Table 6.6 and Figure 6.3 provide an overall assessment of the readiness of health facilities in Bangladesh to provide quality ANC services. Bangladesh health facilities that offer ANC services perform well in terms of availability of iron or folic acid tablets and a blood pressure apparatus. However, only half of the facilities had staff with in-service ANC training. While the staff might have been oriented to ANC during their basic training, in-service training is important to keep providers updated. Guidelines for ANC were also available in only half of the facilities. Of even more concern are the very small percentages of facilities that offer ANC services and have the capacity to provide a hemoglobin or urine protein test (12 percent and 19 percent respectively). Many mothers in Bangladesh suffer from anemia, and it is estimated that one in five maternal deaths are due to pre-eclampsia/eclampsia. To detect these conditions, hemoglobin and urine protein testing are extremely useful. The BHFS results indicate that most

facilities that provide ANC in Bangladesh are not adequately prepared to detect these pregnancy-related risk conditions.

#### Table 6.6 Readiness of health facilities to provide antenatal care services

Among facilities that offer antenatal care (ANC) services, the percentages with the indicated items considered important for the provision of quality ANC services, by background characteristics, Bangladesh HFS 2014

Background characteristics	Guidelines on ANC <sup>1</sup>	Staff trained for ANC any time <sup>2</sup>	Blood pressure apparatus <sup>3</sup>	Hemoglobin testing capacity	Urine protein testing capacity	Iron or folic acid tables	All six items	Number of facilities offering ANC
Facility type								
District and upazila								
public facilities	70.3	83.6	97.7	70.2	68.1	99.1	41.5	47
DH	72.1	85.2	98.4	96.7	86.9	100.0	55.7	5
MCWC	70.7	83.7	92.4	28.3	33.7	96.7	15.2	8
UHC	70.0	83.4	98.8	75.6	73.0	99.5	45.3	34
Union level public								
facilities	47.8	50.0	85.4	7.9	12.0	97.3	3.3	356
UHFWC	52.5	53.6	86.6	10.7	13.2	97.7	3.5	146
UHFWC (upgraded)	47.6	53.7	81.3	3.6	10.1	95.7	1.6	116
USC/RD	40.8	40.0	88.7	8.8	12.5	98.5	5.1	94
Public community clinic								
(CC)	48.2	46.3	85.5	3.6	12.3	95.4	0.6	997
NGO clinic/hospital	72.9	60.4	98.3	69.3	75.1	94.8	32.6	79
Private hospital	24.7	27.5	94.7	87.2	78.5	81.7	8.1	28
Location								
Urban	61.4	55.9	96.9	72.5	73.4	92.6	28.8	121
Rural	48.6	48.1	85.8	6.4	13.8	96.0	2.2	1,387
Division								
Barisal	56.3	38.5	83.0	7.6	8.5	98.4	2.2	115
Chittagong	38.5	57.2	84.1	10.5	16.8	93.2	3.9	280
Dhaka	39.9	57.8	84.3	13.5	21.0	95.9	5.4	412
Khulna	58.5	44.3	93.8	5.1	12.4	91.5	1.7	191
Rajshahi	46.9	35.9	83.8	9.6	18.6	97.2	5.1	212
Rangpur	70.7	39.5	96.1	19.9	27.0	100.0	5.2	203
Sylhet	60.1	54.3	81.7	13.1	18.9	94.7	5.9	96
Total	49.6	48.7	86.7	11.7	18.5	95.7	4.3	1,508
Total excluding CCs	52.5	53.5	89.1	27.5	30.6	96.2	11.6	511

Note: The guidelines for ANC and staff trained in ANC comprise the training domain and the blood pressure apparatus indicator comprises the equipment domain, for assessing readiness to provide ANC services within the health facility assessment methodology proposed by WHO and USAID (2012).

<sup>1</sup> National ANC guidelines or other guidelines relevant to ANC.
<sup>2</sup> Facility has at least one interviewed staff member providing ANC services who reports receiving in-service training in some aspect of ANC. The training must have involved structured sessions, and does not include individual instruction that a provider might have received during routine supervision. <sup>3</sup> Functioning digital blood pressure apparatus or a functioning manual sphygmomanometer and a stethoscope.

# *Figure 6.3* Availability of items (tracer indicators) in health facilities for readiness to provide antenatal care services



As Table 6.6 and Figure 6.4 illustrate, only four percent (12 percent excluding CCs) of facilities that offer ANC services have all six items necessary for a facility to be considered ready to provide quality ANC. The very low level of service readiness is due primarily to the lack of capacity to test for hemoglobin or urine protein at union level facilities and CCs. District and upazila public health facilities and NGO facilities are most likely to be ready to provide ANC services. Surprisingly, only eight percent of private hospitals are considered ready to provide quality ANC services. The main deficiencies of private hospitals are the limited availability of ANC guidelines and staff training.





#### 6.4 BASIC MANAGEMENT AND ADMINISTRATIVE SYSTEMS

#### 6.4.1 Recent In-service Training and Supervision

In-service training and personal supervision related to ANC are key elements in ensuring supportive management of staff who provide ANC services. Training is critical to ensuring that personnel have the knowledge and skills to provide quality ANC services. Personal supervision helps sustain health worker capacity, since it identifies a provider's strengths and weaknesses. Table 6.7 presents information on recent in-service training (during the 24 months preceding the survey) and recent personal supervision (during the 6 months preceding the survey) of ANC providers.

Providers who have received recent in-service training (in-service training during the 24 months preceding the survey) can be expected to have more up-to-date knowledge about their particular service area. Table 6.7 shows that 22 percent (13 percent excluding providers at CCs) of ANC providers received recent ANC training. Thirty percent of ANC providers at CCs received recent in-service ANC training as compared with16 percent among NGO facility providers, 12 to 13 percent of providers at district and upazila public and union level facilities, and only 10 percent of private hospital providers. Providers from rural health facilities (24 percent) are almost twice as likely to have received the ANC training during the 24 months preceding the survey than the providers from urban facilities (13 percent). This can be attributed to the concentration of CCs in rural areas.

Table 6.7 Supportive management for providers of antenatal care services

Among interviewed antenatal care (ANC) providers, the percentages who received training related to their work and personal supervision during the specified time periods, by background characteristics, Bangladesh HFS 2014

	Percentage of	interviewed provider	s who received:	
Background characteristics		Personal supervision during the 6 months preceding the survey <sup>2</sup>	Training related to ANC during the 24 months and personal	Number of interviewed ANC service providers
Facility type				
District and upazila public facilities DH MCWC UHC	<b>12.0</b> 16.7 18.4 10.2	<b>96.2</b> 94.7 97.6 96.4	<b>11.0</b> 15.7 17.3 9.3	<b>433</b> 69 40 325
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>12.8</b> 13.7 11.4 13.0	<b>90.1</b> 89.1 92.6 88.3	<b>11.3</b> 12.7 10.3 10.4	<b>700</b> 290 241 168
Public community clinic (CC)	29.9	94.0	27.9	1,752
NGO clinic/hospital	16.1	95.1	15.7	272
Private hospital	9.9	83.0	9.7	127
<b>Location</b> Urban Rural	12.5 24.2	92.9 93.2	12.0 22.5	638 2,645
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	18.4 29.2 23.3 15.6 13.9 18.6 33.0	90.4 92.7 91.3 94.1 96.4 97.1 90.6	17.3 27.4 21.8 12.6 13.9 18.6 29.2	234 651 1,015 440 412 353 180
Total	21.9	93.1	20.4	3,284
Total excluding CCs	12.9	92.1	11.9	1,532

<sup>1</sup>Training refers only to in-service training. The training must have involved structured sessions, and does not include individual instruction that a provider might have received during routine supervision.

<sup>2</sup> Personal supervision refers to any form of technical support or supervision from a facility-based supervisor or from a visiting supervisor. It may include, but is not limited to, review of records and observation of work, with or without any feedback to the health worker.

The great majority of health workers who provide ANC services are supervised on a routine basis. Table 6.7 shows that nine of 10 providers from public facilities and NGO facilities and more than eight of 10 providers from private hospitals reported receiving personal supervision during the six months preceding the BHFS visit.

#### 6.4.2 In-service Training by Topic

Table 6.8 shows the percentages of providers of ANC services who reported ever receiving training on specific topics related to ANC and who reported receiving training on the topic during the 24 months preceding the assessment. The ANC providers reported ever receiving training on family planning (46 percent), followed by ANC counseling (40 percent) and training on pregnancy complications (37 percent). Around one third of ANC providers had ever received in-service training on ANC screening. The ANC providers were least likely to have received training on sexually transmitted diseases; only 16 percent of ANC providers ever received training on this topic. In general, less than half of providers who ever received training had been trained in the 24 months before the survey.

#### Table 6.8 Training for antenatal care service providers

Among interviewed antenatal care (ANC) service providers, the percentages who reported receiving in-service training on topics related to ANC during the specified period before the survey, by background characteristics, Bangladesh HFS 2014

	Percentage of interviewed providers of ANC who reported receiving in-service training on:										
	ANC cou	naaling	ANC scr		Complica		Family al	opping1	Sexually tra infecti		
		nseling		eening	pregn	ancy	Family pl	anning		ons-	Number of
Background characteristics	During the past 24 months	At any time	During the past 24 months	At any time	During the past 24 months	At any time	During the past 24 months	At any time	During the past 24 months	At any time	interviewed ANC service providers
Facility type											
District and upazila public facilities	8.2	36.7	7.2	30.2	7.8	36.3	9.9	31.9	3.3	15.0	433
DH	11.1	40.5	10.1	33.8	10.5	39.0	8.3	23.0	2.5	12.7	69
MCWC	13.8	59.8	12.7	53.1	12.5	58.4	23.1	77.6	4.3	25.6	40
UHC	6.8	33.1	5.9	26.7	6.7	33.0	8.7	28.2	3.4	14.2	325
Union level public facilities UHFWC	<b>8.4</b> 7.8	<b>38.5</b> 39.5	<b>6.3</b> 6.1	<b>28.2</b> 31.1	<b>8.2</b> 8.0	<b>38.4</b> 38.9	<b>18.4</b> 23.5	<b>54.8</b> 60.4	<b>3.6</b> 3.9	<b>18.7</b> 22.3	<b>700</b> 290
UHFWC (upgraded)		38.3	6.7	25.0	7.0	39.5	17.4	59.1	4.4	17.1	241
USC/RD	9.5	37.0	6.1	28.0	10.4	36.1	11.0	38.9	1.9	14.5	168
Public community clinic (CC)	22.7	41.9	19.0	35.6	19.7	38.1	29.2	46.2	7.7	12.8	1,752
NGO clinic/hospital	12.9	41.4	10.7	38.6	11.3	39.0	22.1	54.6	9.1	32.0	272
Private hospital	8.5	19.5	6.5	18.5	6.8	17.6	7.3	10.9	7.6	9.4	127
Location	0.0	22.0	7.4	00.0	0.0	00.4	40.4	24.4	6.4	10.1	600
Urban Rural	9.2 18.1	33.8 41.0	7.4 15.0	29.6 33.7	8.2 16.0	33.1 38.2	13.4 25.2	34.1 48.2	6.4 6.4	19.1 15.1	638 2,645
	10.1	41.0	15.0	33.7	10.0	30.2	20.2	40.2	0.4	15.1	2,045
Division Barisal	15.9	35.1	10.4	23.2	12.8	33.7	23.0	44.4	4.0	9.4	234
Chittagong	23.1	42.8	17.8	32.7	17.7	37.3	25.6	47.9	7.5	15.5	651
Dhaka	18.8	47.8	13.4	39.9	15.4	42.3	25.6	52.7	6.8	19.5	1,015
Khulna	12.1	34.9	13.1	33.3	11.4	33.3	16.9	35.5	3.3	14.7	440
Rajshahi	4.9	23.8	4.8	19.8	10.0	30.5	14.4	34.7	8.3	14.9	412
Rangpur	10.4	33.2	13.7	29.8	10.3	32.4	20.7	41.4	5.0	13.2	353
Sylhet	27.6	48.0	24.2	41.6	25.7	47.7	36.4	54.3	8.7	14.8	180
Total	16.4	39.6	13.6	32.9	14.5	37.2	22.9	45.5	6.4	15.8	3,284
Total excluding CCs	9.1	36.9	7.4	29.8	8.5	36.2	15.7	44.7	4.8	19.3	1,532

Note: Training refers only to in-service training. The training must have involved structured sessions, and does not include individual instruction that a provider might have received during routine supervision.

<sup>1</sup> Includes training in any of the following: general counseling for family planning, insertion and/or removal of intrauterine contraceptive device (IUCD), insertion and/or removal of implants, performing vasectomy, performing tubal ligation, clinical management of family planning methods including managing side effects, family planning for HIV-positive women, post-partum family planning, injectable contraceptives, and emergency contraceptive pills.
<sup>2</sup> Includes training in any of the following: diagnosing and treating sexually transmitted infections (STIs), the syndromic approach to diagnosing and managing STIs, and the treatment of drug-resistant STIs.

# **Key Findings**

- Only 18 percent of all facilities (39 percent excluding community clinics (CCs)) offer normal delivery services.
- Almost all district hospitals (DHs) and upazila health complexes (UHCs), most private hospitals and maternal and child welfare centers (MCWCs), about half of upgraded union health and family welfare centers (UHFWCs), 28 percent of union level public facilities, and 7 percent of CCs offer normal delivery services.
- Excluding CCs, only 12 percent of health facilities offer caesarean delivery services; these are primarily district and private hospitals, 55 percent of MCWCs, and 20 percent of UHCs.
- Among facilities that offer normal delivery services, the availability of guidelines related to delivery services is generally low (27 percent); district hospitals (DHs) (41 percent), MCWCs (39 percent), and UHCs (41 percent) are slightly more likely to have the guidelines than other facility types.
- About 6 in 10 facilities that offer normal delivery had delivery pack with all necessary equipment such as cord clamps, scissors, suture materials with needle on the day of the survey.
- Fifty four percent (57 excluding CCs) of facilities that provide delivery services have at least one staff member who has ever received in-service training on routine care for labor and delivery; fewer facilities have at least one staff member ever trained in neonatal resuscitation, active management of the third stage of labor (AMTSL) and integrated management of pregnancy and child birth (IMPAC).
- Essential medicines such as injectable uterotonics, diazepam, antibiotics, and intravenous fluids with an infusion set were available in only 28-36 percent of facilities, most often in district and private hospitals.
- One-fourth of facilities that offer normal delivery services have all six essential items for infection control.
- Excluding CCs, only 17 percent of facilities that provide delivery services can be considered Basic Emergency Obstetric and Neonatal Care (BEmONC) facilities, i.e., the facilities offer normal delivery care and have performed all seven signal functions (treatments) for emergency obstetric care in the three months prior to the survey. Only six percent of the facilities have performed all nine signal functions for emergency obstetric care and can be considered Comprehensive Emergency Obstetric and Neonatal Care (CEmONC) facilities.
- Most facilities that provide delivery services (including all private hospitals) do not have the required equipment, medicines, and trained staff to be ready to provide quality services according to the World Health Organization (WHO) criteria.

# 7.1 BACKGROUND

In its effort to attain Millennium Development Goals (MDGs), the Government of Bangladesh has charged the Health, Population and Nutrition Sector Development Program (HPNSDP) (MOHFW 2011) with providing quality, affordable reproductive health services, with an emphasis on maternal and newborn care. The HPNSDP has adopted a national strategy for maternal health that emphasizes the role of Emergency Obstetric Care (EmOC) in reducing maternal mortality and focuses on early detection and appropriate referral of complications and improvement in the quality of maternal care. The results of the 2010 Bangladesh Maternal Mortality and Health Care Survey (NIPORT et al. 2012) demonstrate a substantial reduction in the maternal mortality ratio (MMR). The MMR fell from 322 deaths per 100,000 live births (95 percent CI 253-391) in 1998-2001 to 194 deaths per 100,000 live births (95 percent CI 49-238) in 2007-2010. Bangladesh remains committed to the HPNSDP goal of reducing the MMR to less than 143 deaths per 100,000 live births by 2016.

Institutional delivery is important to reducing maternal and newborn deaths. There is definitive global evidence that the availability of emergency obstetric and neonatal care (EmONC) and skilled attendance at childbirth are crucial to saving the lives of mothers and newborns. Institutional delivery care saves lives because, if a complication arises during labor and delivery in a health facility, a skilled birth attendant is immediately available to manage the complication or to refer the mother to the next level of care. The institutional delivery rate in Bangladesh is still low, although the proportion of births delivered at health facilities has been increasing rapidly from 12 percent in 2004, 17 percent in 2007, and 29 percent in 2011; it is currently at 37 percent. In addition to increasing institutional deliveries, Bangladesh has set a target for the proportion of deliveries by a medically trained provider of 50 percent by 2016 (MOHFW 2011).

Bangladesh has also made significant progress in reducing neonatal deaths. According to the 2014 BDHS, the neonatal mortality rate for the five-year period before the survey was 28 deaths per 1,000 births. The annual rate of decline in neonatal mortality in Bangladesh during the last decade (4 percent per year) is higher than regional and global averages (2 percent and 2.1 percent per year, respectively); however, the decline in neonatal mortality is less than half the annual decrease in the mortality rate for all children 1–59 months (8.6 percent per year) in Bangladesh during the decade (Rubayet 2012).

This chapter explores the following key issues related to the provision of quality delivery and newborn care services at health facilities in Bangladesh:

- Availability of delivery services. Section 7.2, including Table 7.1 and Figure 7.1, examines the availability of maternal health services while Tables 7.2, 7.3, 7.4, and Figure 7.2 provide information on the availability of service guidelines, staff with up-to-date training, and basic items that support quality provision of delivery services. In addition, Table 7.5, and Figure 7.3 provide information on items for infection control.
- Newborn care practice. Section 7.3, including Tables 7.6 and 7.7, provides information on routine newborn care practices in health facilities and the availability of essential medicines for newborns.
- **Signal function for emergency obstetric and newborn care.** Section 7.4, including Table 7.8 and Figure 7.4, reports the extent to which facilities that provide normal delivery care had performed nine signal functions at least once during the three months before the survey.
- **Readiness of health facilities to provide normal delivery.** Section 7.5, including Table 7.9 and Figures 7.5 and 7.6, provides information on the readiness of health facilities to provide normal delivery services according to the WHO criteria.

Basic management and administrative systems. Section 7.6, including Tables 7.10 and Table 11, considers the extent to which essential management and administrative systems are in place to support quality services, including personal supervision and in-service training for the providers of delivery and newborn care.

#### 7.2 **AVAILABILITY OF DELIVERY SERVICES**

#### 7.2.1 **Service Provision**

Table 7.1 and Figure 7.1 provide information on the availability of various maternal health services. Although ANC is available in almost all facilities, normal delivery services are offered in only 18 percent (39 percent excluding CCs) of health facilities. Normal delivery services are widely available in DHs (98 percent), UHCs (97 percent), private hospitals (93 percent), and MCWCs (90 percent). However, only 31 percent of nongovernmental organization (NGO) facilities, 28 percent of union level facilities (primarily at upgraded UHFWCs) offer normal delivery care, and seven percent of CCs provide normal delivery services. Urban facilities (63 percent), as expected, are much more likely than rural facilities (14 percent) to offer normal delivery services. Facilities in Barisal and Khulna divisions (13 percent each) are least likely and facilities in Dhaka (23 percent) are the most likely to offer normal delivery services.

#### Table 7.1 Availability of maternal health services

Among all facilities, the percentages that offer specific maternity services and the full range of maternity services and, among facilities that offer normal delivery services, the percentages with a skilled provider available on-site or on-call 24 hours a day to conduct deliveries, with or without an observed duty schedule, by background characteristics, Bangladesh HFS 2014

	_	Percenta	age of facilities	s offering:				acilities offering very services have:	
Background characteristics	Antenatal care (ANC)	Normal delivery service	Cesarean delivery	ANC and normal delivery service	ANC, normal delivery, and Cesarean delivery	Number of facilities	Provider of delivery care available on-site or on-call 24 hours/day, with observed duty schedule	Provider of delivery care available on-site or on-call 24 hours/day, with or without observed duty schedule	Number of facilities offering normal delivery services
Facility type									
District and upazila public facilities DH MCWC UHC	<b>99.1</b> 98.4 100.0 99.0	<b>95.7</b> 98.4 90.2 96.6	<b>33.8</b> 98.4 55.4 19.5	<b>95.6</b> 96.8 90.2 96.6	<b>33.4</b> 95.2 55.4 19.5	<b>47</b> 5 8 35	<b>88.7</b> 93.4 77.1 90.3	<b>96.3</b> 96.7 90.4 97.5	<b>45</b> 5 7 34
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>95.3</b> 98.2 99.0 87.3	<b>27.7</b> 24.5 47.2 10.9	-	<b>27.7</b> 24.5 47.2 10.9	-	<b>374</b> 149 117 108	<b>7.1</b> 5.8 9.1 2.0	<b>40.1</b> 34.9 43.5 40.7	<b>103</b> 36 55 12
Public community clinic (CC)	98.8	7.2	-	7.2	-	1,010	6.2	29.3	73
NGO clinic/hospital	97.9	30.8	14.9	30.8	14.9	81	61.6	79.7	25
Private hospital	78.5	93.2	95.2	76.2	75.0	36	54.5	98.6	33
<b>Location</b> Urban Rural	92.7 97.8	63.1 14.0	44.8 0.3	58.4 14.0	39.1 0.3	130 1,418	72.8 13.1	94.8 41.1	82 198
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	98.8 97.4 97.9 96.7 94.5 98.9 98.8	13.0 20.0 23.0 12.6 15.7 16.1 18.1	1.8 4.6 6.3 3.6 2.0 2.0 4.9	13.0 19.5 22.2 12.4 15.7 16.1 17.3	1.7 4.0 5.3 3.2 2.0 2.0 4.0	116 287 421 197 224 205 97	39.5 28.7 28.3 34.0 20.6 44.9 30.3	67.4 52.9 70.5 46.4 35.1 58.1 42.4	15 58 97 25 35 33 18
Total	97.4	18.1	4.0	17.7	3.5	1,548	30.6	56.9	280
Total excluding CCs	94.9	38.5	11.5	37.4	10.2	538	39.2	66.6	207

As expected, since union level facilities and CCs do not perform cesarean deliveries, only a very small proportion of all health facilities (four percent) provide cesarean delivery services. Almost all private hospitals (95 percent) have cesarean delivery service, as compared with one-third of district and upazila public facilities, and 15 percent of NGO facilities. Among public facilities, 98 percent of DHs, 55 percent of MCWCs, and 20 percent of UHCs offer cesarean delivery (Table 7.1). Cesarean delivery is available in 45 percent of urban facilities as compared with less than 1 percent of rural facilities.

Table 7.1 also presents information from the BHFS on whether facilities that offer normal delivery services had a delivery care provider available on-site or on-call 24 hours per day and whether they have a duty schedule available for those providers. As Table 7.1 shows, a little over half (67 percent excluding CCs) of facilities that offer delivery care have a provider of delivery care available on-site or on-call 24 hours per day. However, not all of these facilities had a duty schedule available; only 31 percent of all facilities (39 percent excluding CCs) that offer normal delivery services had a provider of delivery care available, either on-site or on-call 24 hours per day, and also had a duty schedule available. The DHs (93 percent) and UHCs (90 percent) are more likely than other facilities to have providers on-site or on-call and also more likely to have a 24-hour duty schedule (Table 7.1).



Figure 7.1 Availability of delivery care services in health facility, by facility type

#### 7.2.2 Availability of Service Guidelines, Trained Staff, and Equipment for Delivery Services

The availability of service guidelines, staff with up-to-date training, and certain basic equipment are key elements in the provision of quality delivery services. Table 7.2 reports the extent to which these items were available on the day of the survey in facilities that offer normal delivery services. Availability of guidelines related to delivery was generally low (27 percent). The DHs (41 percent), MCWCs (39 percent), and UHCs (41 percent) were slightly more likely to have the guidelines than other facility types. Rural facilities (28 percent) were slightly more likely than urban facilities (24 percent) to have any of the guidelines for BEmOC or CEmOC. Facilities in Rajshahi (11 percent), Sylhet (21 percent) and Khulna (21 percent) were less likely than those in other divisions to have BEmOC, or CEmOC guidelines on the day of the survey visit.

Only one in 10 facilities (12 percent excluding CCs) that offer normal delivery services had providers who had received in-service training in IMPAC during the past 24 months, while 39 percent (38 percent excluding CCs) of facilities had at least one provider who ever received in-service training in IMPAC. Among facilities that offer normal delivery services, district and upazila public facilities and NGO

facilities are more likely to have a provider who had ever received in-service training than union level facilities, CCs, and private hospitals.

#### Table 7.2 Guidelines, trained staff, and equipment for delivery services

Among facilities that offer normal delivery services, the percentages with guidelines, at least one staff member recently trained in delivery care, and basic equipment for routine delivery available in the facility on the day of the survey, by background characteristics, Bangladesh HFS 2014

	offerir	entage of fa	delivery					<b>-</b> .					
	Sei	vice that h	ave:					Equipmen	t				
Background characteristics	Guide- lines on BEmOC <sup>1</sup> or CEmOC <sup>1</sup>	Staff trained in IMPAC during the past 24 months <sup>2</sup>	Staff trained in IMPAC at anytime <sup>2</sup>	Emer- gency trans- port <sup>3</sup>	Examina- tion light <sup>4</sup>	Delivery pack <sup>5</sup>	Suction appa- ratus (mucus extractor)	Manual vacuum extractor	Vacuum aspirator or D&C kit <sup>6</sup>	Neonatal bag and mask	Parto- graph <sup>7</sup>	Gloves <sup>8</sup>	Number of facilities offering normal delivery services
Facility type													
District and upazila public facilities DH MCWC	<b>40.5</b> 41.0 38.6	<b>18.9</b> 19.7 18.1	<b>56.0</b> 57.4 65.1	<b>83.4</b> 93.4 67.5	<b>82.1</b> 95.1 86.7	<b>80.5</b> 83.6 81.9	<b>75.7</b> 95.1 74.7	<b>51.9</b> 60.7 48.2	<b>56.8</b> 73.8 65.1	<b>79.5</b> 90.2 71.1	<b>47.3</b> 59.0 59.0	<b>87.8</b> 88.5 83.1	<b>45</b> 5 7
UHC	40.8	18.9	53.9	85.2	79.1	79.7	73.0	51.4	52.6	79.6	43.1	88.6	34
Union level public facilities UHFWC UHFWC (upgraded)	<b>26.1</b> 34.2 19.9	<b>5.9</b> 9.3 3.5	<b>31.7</b> 35.8 28.8	<b>8.5</b> 13.8 6.8	<b>47.6</b> 51.9 43.5	<b>49.9</b> 60.9 46.5	<b>38.7</b> 33.5 38.5	<b>15.2</b> 12.6 16.4	<b>15.5</b> 18.4 13.4	<b>34.7</b> 31.5 37.8	<b>17.1</b> 14.3 19.0	<b>69.9</b> 67.6 73.5	<b>103</b> 36 55
USC/RD	30.0	6.9	33.2	0.0	54.3	32.2	56.2	17.8	15.8	29.9	16.4	59.7	12
Public community clinic (CC)	27.4	1.3	40.7	10.2	60.2	45.3	22.6	7.7	12.7	22.2	15.4	56.5	73
NGO clinic/ hospital	27.9	27.8	52.8	57.6	90.4	74.2	73.5	35.9	43.2	71.0	39.9	87.4	25
Private Hospital	11.3	8.5	22.0	69.2	88.2	80.8	74.0	44.5	55.2	71.3	30.5	74.1	33
<b>Location</b> Urban Rural	24.1 28.4	16.9 5.8	42.0 37.4	76.2 14.6	87.3 55.9	76.8 52.3	77.7 35.4	45.6 15.8	54.0 18.1	74.9 34.4	40.3 18.9	81.6 67.1	82 198
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	32.7 26.0 25.8 21.2 10.8 56.2 20.5	11.7 14.8 7.5 11.1 2.3 7.3 11.0	23.7 33.0 45.0 37.0 35.9 43.9 34.2	32.3 32.6 37.2 45.4 17.4 22.2 40.5	43.7 55.0 67.9 74.0 46.8 93.5 72.2	54.8 49.5 60.8 47.1 58.3 89.8 52.1	41.6 49.1 55.1 56.2 28.2 49.8 32.4	23.1 30.2 19.0 21.8 16.4 41.1 26.1	28.8 36.2 22.1 34.9 12.5 46.4 29.4	48.9 43.6 47.2 51.3 28.7 62.9 44.2	26.7 17.8 29.6 29.2 13.6 35.1 22.1	83.2 66.2 59.2 82.0 63.2 98.2 96.1	15 58 97 25 35 33 18
Total	27.2	9.1	38.7	32.7	65.1	59.5	47.8	24.5	28.6	46.3	25.2	71.4	280
Total excluding CCs	27.1	11.8	38.0	40.6	66.8	64.5	56.7	30.5	34.2	54.8	28.6	76.6	207

Note: The indicators presented in this table comprise the staff training and equipment domains for assessing readiness to provide delivery care within the health facility assessment methodology proposed by WHO and USAID (2012).

<sup>1</sup>BEmOC (basic emergency obstetric care) guidelines, or CEmOC (comprehensive emergency obstetric care) guidelines.

<sup>2</sup> Facility has at least one interviewed staff member providing the service who reports receiving in-service training in IMPAC. The training must have involved

structured sessions, and does not include individual instruction that a provider might have received during routine supervision.

<sup>3</sup> Facility had a functioning ambulance or other vehicle for emergency transport stationed at the facility and had fuel available on the day of the survey, or facility has access to an ambulance or other vehicle for emergency transport that is stationed at another facility or that operates from another facility.

<sup>4</sup> A functioning flashlight is acceptable.

<sup>5</sup> Either the facility had a sterile delivery pack available at the delivery site or all the following individual equipment must be present: cord clamp, episiotomy scissors, scissors (or blade) to cut cord, suture material with needle, and needle holder.

<sup>6</sup> Facility had a functioning vacuum aspirator or else a dilatation and curettage (D&C) kit available.

<sup>7</sup> A blank partograph at the service site.

<sup>8</sup> Disposable latex gloves or equivalent available at the service site.

The 2014 BHFS also assessed the availability of emergency transport at the facility. Emergency transport may be critical if a woman needs to be referred to another facility for more specialized care. About one-third (41 percent excluding CCs) of facilities have emergency transport. The DHs (93 percent) and UHCs (85 percent) were more likely than MCWCs (68 percent), private hospitals (69 percent), and NGO facilities (58 percent) to have emergency transport. Only 10 percent of CCs and nine percent of union level public facilities also reported the availability of emergency transport. This is not surprising since union level

public facilities and CCs are not generally expected to have emergency transport, although a few may use three wheelers/vans as emergency transport.

With respect to the equipment necessary to support routine delivery care, 65 percent (67 percent excluding CCs) of facilities that offer normal delivery services had an examination light and 71 percent (77 percent excluding CC) had gloves available on the day of the survey visit. Also, 60 percent (65 percent excluding CCs) of facilities had a delivery pack (or the all of the individual equipment needed for a normal delivery) available on the day of the survey visit. Eighty percent or more of DHs, MCWCs, UHCs, and private hospitals that offer normal delivery services had a delivery pack available. The NGO facilities were only slightly less likely to have delivery pack (74 percent).

A suction apparatus (mucus extractor) was less widely available, with only 48 percent (57 percent excluding CCs) of facilities that offer delivery services having one available at the service site on the day of the survey visit. A neonatal bag and mask were available in 46 percent (55 percent excluding CCs) of facilities. The DHs are much more likely than other facility types to have these items. Approximately one in four facilities had a manual vacuum extractor, a vacuum aspirator or D&C kit, or a partograph available on the day of the survey visit. If CCs are excluded, the percentages of facilities with these items increased modestly.



Figure 7.2 Items to support quality provision of delivery services

Table 7.3 presents information on the availability of staff with in-service training in areas related to delivery or newborn care services. The table considers staff who have ever received in-service training in the area and staff who received in-service training within 24 months before the survey.

Overall, the proportion of facilities with staff who had ever received in-service training in any areas related to delivery and newborn care are low, and the proportion with staff with recent training are even lower. Staff were more likely to have ever received training on routine care for labor and delivery than other subjects; 54 percent (57 percent excluding CCs) of facilities that offer normal delivery services had at least one trained staff who ever received in-service training in routine care for labor and delivery. However, most facilities did not have staff with recent training on the topic; only 12 percent (15 percent excluding CCs) of facilities had at least a trained staff with in-service training in routine care for labor and delivery in the 24

months before the survey. District and upazila public facilities (72 percent), NGO facilities (75 percent), and union level facilities (58 percent) are more likely to have at least one staff ever trained in routine care for labor and delivery than CCs (43 percent) and, especially, private hospitals (22 percent).

#### Table 7.3 Availability of trained staff on normal delivery or newborn care

Among facilities that offer normal delivery services, the percentages with trained staff on specific topics related to delivery and newborn care, by background characteristics, Bangladesh HFS 2014

		Percentag	ge of facilitie	es offering no	ormal delive	ry services th	nat have at l	east one sta	aff who receiv	/ed in-servi	ce training		
Background characteristics	Training on IMPAC during the past 24 months		Training on routine care for labor and delivery during the past 24 months	Training on routine care for labor and delivery at anytime	Training on active manage- ment of third stage of labor (AMTSL) during the past 24 months	Training on active managem ent of third stage of labor (AMTSL) at anytime	Training on emer- gency obstetric care/life- saving skills during the past 24 months	Training on emer- gency obstetric care/life- saving skills at anytime	Training on post- abortion care during the past 24 months	Training on post- abortion care at anytime	Training on neonatal resusci- tation during the past 24 months	Training on neonatal resusci- tation at anytime	Number of facilities offering normal delivery services
Facility type													
District and upazila public facilities DH MCWC UHC	<b>18.9</b> 19.7 18.1 18.9	<b>56.0</b> 57.4 65.1 53.9	<b>25.0</b> 27.9 19.3 25.7	<b>72.1</b> 72.1 78.3 70.8	<b>19.5</b> 24.6 19.3 18.8	<b>67.2</b> 63.9 71.1 66.9	<b>15.3</b> 23.0 15.7 14.1	<b>45.9</b> 52.5 55.4 42.9	<b>18.5</b> 19.7 14.5 19.2	<b>57.7</b> 59.0 65.1 56.0	<b>43.3</b> 50.8 36.1 43.6	<b>72.2</b> 80.3 74.7 70.5	<b>45</b> 5 7 34
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>5.9</b> 9.3 3.5 6.9	<b>31.7</b> 35.8 28.8 33.2	<b>7.0</b> 5.4 8.0 6.9	<b>57.8</b> 50.5 61.3 63.8	<b>10.0</b> 5.8 13.3 6.9	<b>43.6</b> 35.6 48.4 45.6	<b>2.7</b> 3.0 2.8 1.7	<b>24.0</b> 24.8 23.8 22.9	<b>2.1</b> 1.6 2.9 0.0	<b>25.9</b> 27.9 27.8 11.0	<b>20.3</b> 23.4 20.5 9.9	<b>43.5</b> 51.7 38.8 40.7	<b>103</b> 36 55 12
Public com- munity clinic (CC) NGO clinic/ hospital Private	1.3 27.8	40.7 52.8	1.3 41.4	43.1 74.6	1.3 35.9	30.2 67.7	1.3 24.0	20.1 42.9	0.0 19.8	17.9 46.0	8.0 33.0	37.1 64.0	73 25
hospital	8.5	22.0	7.1	21.8	6.8	19.7	6.8	19.7	6.8	15.4	8.5	16.9	33
<b>Location</b> Urban Rural	16.9 5.8	42.0 37.4	21.9 7.2	51.3 54.4	18.6 8.1	46.8 41.8	14.5 3.6	34.1 25.0	13.3 3.5	36.7 26.6	28.7 17.2	49.8 43.2	82 198
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	11.7 14.8 7.5 11.1 2.3 7.3 11.0	23.7 33.0 45.0 37.0 35.9 43.9 34.2	19.0 15.8 8.2 21.2 3.5 7.8 18.1	46.1 47.2 64.6 47.6 35.9 61.3 48.9	17.5 18.1 6.1 25.7 1.2 8.6 15.4	43.9 42.9 45.0 48.7 18.7 59.0 45.5	10.6 12.9 4.6 11.6 1.2 3.6 5.6	19.6 31.8 29.8 19.4 24.6 34.8 13.9	3.8 12.3 4.2 9.3 2.1 3.8 10.0	19.6 30.0 27.8 24.6 28.8 44.2 27.0	20.9 24.1 12.9 48.7 7.4 17.6 43.5	41.0 48.7 48.9 62.1 12.9 45.5 56.4	15 58 97 25 35 33 18
Total	9.1	38.7	11.5	53.5	11.2	43.2	6.8	27.7	6.4	29.5	20.6	45.2	280
Total excluding CCs	11.8	38.0	15.1	57.2	14.7	47.8	8.7	30.4	8.6	33.6	25.0	48.0	207

Note: IMPAC = Integrated management of pregnancy and childbirth.

Note: Training here refers only to in-service training. The training must have involved structured sessions, and does not include individual instruction that a provider might have received during routine supervision.

Also shown in Table 7.3, 45 percent (48 percent excluding CCs) of facilities that offer normal delivery services reported having at least one staff member who had ever received in-service training in neonatal resuscitation but only 21 percent (25 percent excluding CCs) of facilities had at least one staff member with recent in-service training on the subject. Slightly more than 40 percent (48 percent excluding CCs) of facilities had one staff member who ever received in-service training in AMTSL. However, only about 11 percent (15 percent excluding CCs) of facilities had one staff member who ever received in-service training during the 24 months before the survey. Even fewer facilities had staff with in-service training in post-abortion care or in emergency obstetric care. Only around three out of 10 facilities (34 percent excluding CCs) has at least one staff member who ever received in-service training in post-abortion care (30 percent excluding CCs) of facilities had at least one staff member who ever received in-service training in emergency in service training in emergency based at least one staff member who ever received in-service training in emergency of facilities had at least one staff member who ever received in-service training in emergency based to be the survey.

obstetric care. Less than 10 percent of facilities reported that staff received training on these subjects during the 24 months before the survey.

# 7.2.3 Availability of Medicines, Commodities and Infection Control Items for Delivery Services

Table 7.4 describes the availability of essential medicines and commodities for delivery care and priority medicines for mothers.

#### **Essential Medicines and Commodities**

Overall, none of the medicines and commodities considered essential for normal delivery care was widely available at the facilities that offer normal delivery care. Facilities were least likely to have injectable magnesium sulphate (22 percent) and most likely to have intravenous fluid infusion sets (36 percent).

Analysis of the variation by facility type showed that district and upazila level facilities, NGO facilities, and private hospitals that offer normal delivery care are generally more likely to have the essential medicines and commodities available than union level facilities and CCs. For example, around 80 percent of DHs and private hospitals and more than 60 percent of NGO facilities that offer normal delivery care had injectable uterotonic available as compared with 11 percent of union facilities and 17 percent of CCs.

#### Priority Medicines for Mothers

Table 7.4 also provides information on the availability of priority medicines for mothers, as defined by WHO. In general, these priority medicines are not widely available, and they are much more likely to be available in higher level facilities than in lower level facilities. Moreover, even among higher level facilities, there is considerable variability in the availability of the priority medicines. Sodium chloride injectable solution, azithromycin capsules or tablets, and cefixime capsules or tablets are the most widely available priority medicines, with seven in 10 or more district hospitals, private hospitals, and NGO facilities reporting that they have these medications. With the exception for these three medicines, private hospitals are more likely than district hospitals and NGO facilities to have the priority medicines for mothers (Table 7.4).

#### Table 7.4 Medicines and commodities for delivery

Among facilities that offer normal delivery services, the percentages with essential medicines and commodities for delivery care, and priority medicines for mothers observed to be available on the day of the survey, by facility type, Bangladesh HFS 2014

Medicines	District and upazila public facilities	DH	MCWC	UHC	Union level public facilities	UHFWC	UHFWC (up- graded)	USC/RD	Public com- munity clinic (CC)	NGO clinic/ hospital	Private hospital	Total	Total ex- cluding CCs
Essential medicines for delivery <sup>1</sup>													
Injectable uterotonic													
(oxytocin) <sup>2</sup>	64.1	83.6	62.7	61.5	11.4	16.8	6.8	16.3	17.1	61.7	81.6	34.2	40.3
Injectable antibiotic <sup>3</sup> Injectable magnesium	69.3	82.0	44.6	72.4	8.5	18.6	0.2	16.4	13.0	64.2	76.3	32.5	39.4
sulphate <sup>2</sup>	38.7	59.0	31.3	37.1	6.8	8.8	5.7	6.1	5.3	47.5	63.9	22.0	27.9
Injectable diazepam	60.9	83.6	59.0	57.9	1.9	5.1	0.0	1.2	5.3	68.5	83.7	28.0	36.0
Skin disinfectant Intravenous fluids with	47.1	59.0	49.4	44.8	14.9	16.2	15.5	8.2	0.9	64.9	63.6	26.7	35.8
infusion set <sup>4</sup>	74.9	78.7	66.3	76.1	5.1	7.4	2.0	12.5	17.9	70.1	89.8	35.6	41.8
Priority medicines for mothers⁵ Sodium chloride													
injectable solution	72.3	86.9	51.8	74.3	11.9	17.4	5.6	24.7	26.5	84.4	76.8	39.6	44.3
Injectable Calcium													
gluconate Ampicillin powder for	13.0	19.7	9.6	12.6	5.5	12.3	2.2	0.0	5.0	33.9	60.6	15.6	19.4
injection	22.0	24.6	8.4	24.4	5.3	12.4	1.8	0.0	5.3	21.9	45.2	14.2	17.3
Injectable													
metronidazole Misoprostol capsules	38.2	65.6	28.9	35.9	0.1	0.3	0.0	0.0	0.0	53.9	72.2	19.6	26.5
or tablets Azithromycin capsules or tablets or oral	32.8	44.3	54.2	26.7	20.5	30.2	12.4	29.2	14.4	54.2	59.0	28.5	33.4
liquid Cefixime capsules or	61.2	80.3	20.5	66.7	9.8	17.1	3.2	18.2	5.3	83.0	74.4	31.1	40.3
tablets Benzathine benzyl	40.9	72.1	16.9	41.2	4.6	6.3	2.3	10.1	7.7	79.8	70.6	25.8	32.2
penicillin powder for injection Injectable	13.9	16.4	8.4	14.6	5.4	8.3	3.1	7.4	6.1	16.1	36.8	11.7	13.6
bethamethasone/ dexamethasone	41.3	55.7	18.1	43.9	0.0	0.0	0.0	0.0	0.0	56.7	72.6	20.4	27.5
Nifedipine capsules or tablets	13.3	32.8	4.8	12.2	0.0	0.0	0.0	0.0	0.0	20.9	62.4	11.4	15.5
Number of facilities offering normal													
delivery services	45	5	7	34	103	36	55	12	73	25	33	280	207

Note: The essential medicines presented in this table comprise the medicines domain for assessing readiness to provide basic obstetric care within the health facility assessment methodology proposed by WHO and USAID (2012).

Note: The priority medicines for mothers are defined by WHO; the list is published at http://www.who.int/medicines/publications/A4prioritymedicines.pdf.

<sup>1</sup> All essential medicines for delivery, were assessed and were available at the service delivery site.

<sup>2</sup> Injectable uterotonic (e.g., oxytocin), and injectable magnesium sulphate are also classified as priority medicines for mothers.

<sup>3</sup> Injectable penicillin, injectable gentamycin, injectable ampicillin, or injectable ceftriaxone.

<sup>4</sup> Normal saline solution, lactated Ringer's solution, or 5% dextrose solution.

<sup>5</sup> All priority medicines for mothers were assessed and were available anywhere in the facility.

## 7.2.4 Availability of Infection Control Items during Provision of Delivery Care

Infection control is vital during delivery care. Table 7.5 shows the proportion of facilities that offer normal delivery care with items considered important for infection control available at the service site on the day of the survey visit. Among facilities that offer normal delivery services, around three-quarters (84 percent excluding CCs) had soap and running water or alcohol-based hand disinfectant available at the service site. These items were almost universally available in district and upazila level public facilities, NGO facilities, and private hospitals that offer normal delivery services (94 percent, 95 percent, and 98 percent, respectively) compared with 72 percent of union level public facilities and 56 percent of CCs. Latex gloves were available in 71 percent (77 percent excluding CCs) of facilities that offer delivery services. District and upazila level public facilities and NGO facilities are slightly more likely than either private hospitals or union level public facilities (88 percent and 87 percent versus 74 percent and 70 percent, respectively) to have latex gloves. The CCs were least likely to have latex gloves (57 percent). Two-thirds of facilities that offer delivery

services had a sharps container available at the service site on the day of the survey visit. Half of the facilities had a waste receptacle with plastic bin liner.

#### Table 7.5 Items for infection control during provision of delivery care

Among facilities that offer normal delivery services, the percentages with indicated items for infection control observed to be available at the service site on the day of the survey, by background characteristics, Bangladesh HFS 2014

		Perc	entage of fac	ilities offering	normal deliver	y services th	hat have items	for infection	control		
Background characteristics	Soap	Running water <sup>1</sup>	Soap and running water	Alcohol- based hand disinfectant	Soap and running water or else alcohol based and disinfectant	Latex gloves <sup>2</sup>	Sharps container	Waste receptacle <sup>3</sup>	All 6 items available*	At least 4 items available	Number of facilities offering normal delivery services
Facility type						0					
District and upazila											
public facilities DH MCWC UHC	<b>94.8</b> 96.7 97.6 93.9	<b>92.3</b> 96.7 92.8 91.6	<b>90.5</b> 93.4 92.8 89.5	<b>63.8</b> 65.6 63.9 63.5	<b>93.5</b> 95.1 95.2 92.9	<b>87.8</b> 88.5 83.1 88.6	<b>73.5</b> 80.3 77.1 71.8	<b>62.6</b> 83.6 50.6 61.9	<b>40.3</b> 49.2 32.5 40.6	<b>79.3</b> 91.8 79.5 77.4	<b>45</b> 5 7 34
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>88.4</b> 89.1 87.2 91.9	<b>67.4</b> 62.6 69.4 72.8	<b>62.0</b> 62.6 60.4 67.6	<b>39.9</b> 40.1 38.0 48.2	<b>72.2</b> 70.6 71.9 78.8	<b>69.9</b> 67.6 73.5 59.7	<b>60.2</b> 69.2 53.0 66.4	<b>36.1</b> 35.6 35.6 40.0	<b>16.3</b> 17.7 15.7 14.5	<b>50.6</b> 47.6 52.2 52.1	<b>103</b> 36 55 12
Public community clinic (CC)	82.4	48.1	48.1	38.1	56.0	56.5	65.6	43.6	10.2	43.4	73
NGO clinic/hospital	95.4	92.6	90.4	70.4	95.4	87.4	72.2	60.4	40.7	82.7	25
Private hospital	97.6	94.9	94.9	73.8	97.6	74.1	70.9	68.0	43.5	81.0	33
<b>Location</b> Urban Rural	95.3 87.2	93.5 63.0	91.4 60.3	69.6 41.9	95.4 68.7	81.6 67.1	73.0 63.3	65.1 41.3	43.5 15.9	80.6 51.2	82 198
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur	94.8 80.6 89.5 85.8 95.6 94.8	63.5 63.5 73.6 81.5 65.5 84.5	63.5 60.8 70.6 71.0 65.5 84.5	41.4 36.4 45.9 47.6 61.6 88.9	70.5 71.4 75.9 74.7 70.1 94.8	83.2 66.2 59.2 82.0 63.2 98.2	61.0 67.7 65.7 58.7 57.4 82.2	41.7 37.9 63.3 38.6 34.8 55.3	29.9 15.2 18.5 33.9 26.0 51.1	53.1 54.3 58.3 44.6 57.6 84.1	15 58 97 25 35 33
Sylhet	98.8	73.4	73.4	32.3	83.3	96.1	65.6	33.1	9.4	72.6	18
Total Total excluding CCs	89.6 <i>92.1</i>	71.9 80.3	69.4 76.9	50.0 54.2	76.5 83.7	71.4 76.6	66.1 <i>6</i> 6.3	48.3 50.0	24.0 28.9	59.8 65.6	280 207

<sup>1</sup> Piped water, water in bucket with specially fitted tap, or water in pour pitcher.

<sup>2</sup> Non-latex equivalent gloves are acceptable.

<sup>3</sup> Waste receptacle with plastic bin liner.

\* The facility had the following six infection control items: soap, running water, alcohol-based hand disinfectant, latex gloves, sharps container, and waste receptacle.

Table 7.5 and Figure 7.3 show that, among facilities that offer delivery services, 24 percent (29 percent excluding CCs) of facilities have all six items for infection control and 60 percent (66 percent excluding CCs) have at least four items for infection control. Most DHs (92 percent), MCWCs (80 percent), private hospitals (81 percent), and NGO facilities (83 percent) have at least four items for infection control. In contrast, only around half of the union level facilities and 43 percent of CCs have at least four items for infection control.



Figure 7.3 Items for infection control in delivery service area

# 7.3 NEWBORN CARE PRACTICES

# 7.3.1 Routine Newborn Care

To ensure the survival of newborns, it is crucial to follow appropriate newborn care practices routinely for every newborn. Table 7.6 presents information from the 2014 BHFS on the extent to which various practices are components of newborn care at facilities that offer normal delivery services in Bangladesh.

The results show that, regardless of facility type, more than 9 in 10 facilities that offer normal delivery services reported that it is routine practice to keep the newborn warm by drying and wrapping them and to begin breastfeeding within the first hour.

There is more variability with other practices. For example, district hospitals, MCWCs, UHCs, NGO facilities, and private hospitals are generally more likely than lower level public facilities to perform delivery to abdomen, routinely conduct a complete head-to-toe examination of newborn before discharge, and weigh the newborn immediately after delivery.

#### Table 7.6 Newborn care practices

Among facilities that offer normal delivery services, the percentages reporting the indicated practice is a routine component of newborn care, by facility type, Bangladesh HFS 2014

Newborn care practices	District and upazila public facilities	DH	MCWC	UHC	Union level public facilities	UHFWC	UHFWC (upgraded)	USC/RD	Public com- munity clinic (CC)	NGO clinic/ hospital	Private hospital	Total	Total excluding CCs
Delivery to the													
abdomen Drying and wrapping	87.3	85.2	80.7	88.9	70.9	68.8	72.6	69.6	54.5	73.8	75.7	70.1	75.6
newborns to keep	95.4	96.7	95.2	95.3	93.4	91.6	94.4	93.7	94.2	95.1	98.1	04.6	94.8
warm Initiation of breastfeeding	95.4	96.7	95.2	95.3	93.4	91.6	94.4	93.7	94.2	95.1	98.1	94.6	94.8
within the first hour Routine complete	97.6	98.4	96.4	97.8	94.3	91.7	96.1	93.7	100.0	100.0	97.3	97.2	96.2
(head-to-toe) examination of newborns before													
discharge Suctioning the newborn with	86.7	86.9	83.1	87.4	71.4	57.7	76.9	87.7	70.7	87.2	84.4	76.6	78.7
catheter	68.3	80.3	63.9	67.4	37.3	32.8	35.8	58.0	17.7	74.1	82.6	45.9	55.8
Suctioning the newborn with	00.0	00.0	00.0	07.4	01.0	02.0	00.0	00.0		74.1	02.0	40.0	00.0
suction bulb Weighing the	85.1	93.4	86.7	83.5	54.3	55.6	51.8	62.3	23.5	61.6	68.9	53.6	64.3
newborn immediately upon													
delivery	86.0	100.0	92.8	82.5	62.0	51.4	70.8	53.0	55.6	92.2	88.8	70.1	75.2
Giving full bath						• • • •							
shortly after birth1	13.5	16.4	9.6	13.8	10.5	13.3	10.9	0.0	15.4	12.6	10.6	12.5	11.4
Number of facilities offering normal													
delivery services	45	5	7	34	103	36	55	12	73	25	33	280	207

The results in Table 7.6 also show that unnecessary or undesirable practices are implemented in some facilities. For example, around two-thirds of district and upazila facilities, 74 percent of NGO facilities, and 83 percent of private hospitals reported that they routinely suction the newborn with a catheter. This practice may injure the newborn and can also risk mother-to-child transmission of HIV. Another undesirable practice—giving the baby a full bath shortly after birth—is much less common; only 10 to 15 percent of facilities that offer normal delivery care report that they fully bathe newborns.

#### 7.3.2 Availability of Essential Medicines for Newborns

Table 7.7 provides information on the availability of four essential medicines for newborn care at the service delivery site on the day of the survey. Eight in 10 facilities that offer normal delivery care (78 percent excluding CCs) had amoxicillin syrup or suspension available. Amoxicillin syrup or suspension was more likely to be available at union level public facilities (87 percent), CCs (85 percent), and district and upazila level public facilities (79 percent) as compared with private hospitals (55 percent) and NGO facilities (71 percent).

Only a minority (28 percent or less) of facilities that offer delivery services had the other three essential medicines for newborn care available at the service site on the day of the survey. Private hospitals were somewhat better supplied with the essential medicines other than amoxicillin syrup or suspension than public and NGO facilities.

#### Table 7.7 Essential Medicines for newborn care

Among facilities that offer normal delivery services, the percentages with essential medicines for newborns observed to be available on the day of the survey, by facility type, Bangladesh HFS 2014

Essential medicines for newborn care	District and upazila public facilities	DH	MCWC	UHC	Union level public facilities	UHFWC	UHFWC (up- graded)	USC/RD	Public com- munity clinic (CC)	NGO clinic/ hospital	Private hospital	Total	Total excluding CCs
Antibiotic eye ointment													
for newborn	28.2	39.3	36.1	24.9	19.4	26.8	14.1	21.4	24.2	26.4	29.5	23.9	23.8
Injectable gentamicin	40.6	50.8	14.5	44.4	0.7	2.0	0.0	0.0	0.0	40.7	70.0	18.8	25.4
Ceftriaxone powder for													
injection	57.3	68.9	25.3	62.1	5.6	12.1	2.5	0.0	5.3	67.9	76.3	27.8	35.8
Amoxicillin syrup/													
suspension	79.3	77.0	91.6	77.1	86.6	80.8	89.4	91.3	85.2	70.5	54.8	79.9	77.9
Number of facilities offering normal		_	_					10					
delivery services	45	5	7	34	103	36	55	12	73	25	33	280	207

Note: The essential medicines and antibiotic eye ointment for children presented in this table comprise the medicines domain for assessing readiness to provide basic obstetric care within the health facility assessment methodology proposed by WHO and USAID (2012).

### 7.4 SIGNAL FUNCTIONS FOR EMERGENCY OBSTETRIC AND NEWBORN CARE

Complications of labor and delivery can be expected to occur in a certain percentage of deliveries. It is estimated that approximately 15 percent of mothers develop life-threatening complications at the time of delivery, even if the mothers are otherwise normal during the antenatal period. In such situations, facilities must be equipped to provide Emergency Obstetric and Neonatal Care (EmONC). Within EmONC, there are nine signal functions layered in three levels: Obstetric first aid, Basic Emergency Obstetric and Neonatal Care (EEMONC), and Comprehensive Emergency Obstetric and Neonatal Care (CEMONC). Facilities are considered as BEmONC facilities if they performed the first seven signal functions over the designated three-month period. The facilities are considered as CEMONC facilities if they performed all nine signal functions over a designated three-month period.

Table 7.8 and Figure 7.4 report on the experience of facilities that offer normal delivery services in performing the signal functions over a three-month period before the survey. The results show that, in the three months before the survey, 51 percent (60 percent excluding CCs) of facilities administered parenteral oxytocin, 45 percent (57 percent excluding CCs) of facilities administered parenteral antibiotics, and 30 percent (34 percent excluding CCs) of facilities that offer normal delivery care had performed all three signal functions in the three months prior to the survey. District and upazila level public facilities, NGO facilities, and private hospitals were more likely to have administered these signal function items than union level public facilities and CCs.

#### Table 7.8 Signal functions for emergency obstetric care

Among facilities that offer normal delivery services, percentages reporting that they performed the signal functions for emergency obstetric care at least once during the three months before the survey, by background characteristics, Bangladesh HFS 2014

		tage of facili plied parente			Percent	age of facil	ities that car	ried out:		Percent			
Background characteristics	Anti- biotics	Oxytocic	Anti- con- vulsant	Assisted vaginal delivery	Manual removal of placenta	Removal of retained products of concep- tion (MVA)	Neonatal resus- citation	Blood trans- fusion	Cae- sarean delivery	3 signal functions <sup>1</sup>	7 signal functions <sup>2</sup>	all 9 signal functions <sup>3</sup>	Number of facilities offering normal delivery services
Facility type													
District and upazila public facilities DH MCWC UHC	<b>87.1</b> 95.1 79.5 87.4	<b>84.8</b> 90.2 85.5 83.9	<b>58.3</b> 78.7 48.2 57.3	<b>82.1</b> 85.2 74.7 83.1	<b>78.7</b> 93.4 72.3 77.8	<b>66.2</b> 80.3 55.4 66.3	<b>71.5</b> 78.7 66.3 71.5	<b>24.5</b> 90.2 9.6 17.6	<b>34.4</b> 96.7 60.2 19.7	<b>54.3</b> 75.4 42.2 53.6	<b>36.0</b> 52.5 22.9 36.3	<b>9.8</b> 49.2 6.0 4.7	<b>45</b> 5 7 34
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>31.1</b> 32.6 29.0 36.2	<b>38.5</b> 36.8 38.1 45.7	<b>13.5</b> 13.7 14.3 9.0	<b>38.6</b> 26.6 43.2 53.9	<b>27.7</b> 23.0 24.8 56.0	<b>18.4</b> 16.8 16.2 33.5	<b>30.8</b> 22.3 33.5 44.5	-	-	<b>10.4</b> 11.4 10.1 9.0	<b>1.4</b> 0.0 0.9 7.9	<b>0.0</b> 0.0 0.0 0.0	<b>103</b> 36 55 12
Public community clinic (CC)	9.6	24.1	18.5	27.4	20.9	11.5	26.0	-	-	8.6	0.0	0.0	73
NGO clinic/ hospital	72.4	66.9	39.0	58.5	65.3	52.2	58.7	14.5	44.6	36.6	27.6	9.3	25
Private hospital	86.9	86.4	60.6	67.5	67.2	59.9	65.6	56.8	96.4	57.1	32.1	16.4	33
<b>Location</b> Urban Rural	84.1 28.6	81.2 37.7	55.6 19.3	71.2 38.3	73.5 29.3	63.2 19.4	68.1 32.2	38.3 1.1	68.1 1.4	51.6 13.8	33.0 4.2	14.1 0.3	82 198
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	47.6 53.0 49.3 41.5 31.0 38.2 36.7	46.4 51.9 51.0 57.6 30.3 69.2 41.8	19.5 27.0 27.5 34.4 20.8 53.8 29.0	41.7 47.3 48.8 42.7 48.2 44.8 63.3	45.4 46.3 39.0 37.5 42.0 46.3 43.9	29.8 32.8 29.6 29.0 32.3 44.5 29.0	31.7 39.2 47.1 57.7 29.6 49.8 31.8	6.4 13.7 15.9 18.6 8.8 2.7 4.3	11.6 22.6 26.6 27.0 11.8 12.4 18.8	17.6 25.1 26.8 27.2 19.6 27.9 22.1	8.1 16.9 11.3 10.8 13.7 11.6 12.0	2.7 7.6 4.5 4.4 3.8 1.6 0.9	15 58 97 25 35 33 18
Total <i>Total excluding CC</i> s	44.8 57.3	50.5 59.8	29.9 34.0	47.9 55.2	42.3 <i>4</i> 9.8	32.3 39.6	42.8 <i>4</i> 8.7	12.0 16.2	21.0 28.4	24.9 30.7	12.6 <i>17.1</i>	4.4 5.9	280 207

Note: MVA = Manual vacuum aspiration.

"-" Means that blood transfusion and Caesarian delivery services are not provided at this type of facility.

<sup>1</sup> Antibiotics, oxytocin, anticonvulsant.

<sup>2</sup> Antibiotics, oxytocin, anticonvulsant, assisted vaginal delivery, manual removal of placenta, removal of retained product of conception, and neonatal resuscitation.

<sup>3</sup> Antibiotics, oxytocin, anticonvulsant, assisted vaginal delivery, manual removal of placenta, removal of retained product of conception, neonatal resuscitation, blood transfusion, and caesarean delivery.

With the other signal functions described in Table 7.8, facilities were most likely to report at least one assisted vaginal delivery (48 percent) during the three months before the survey. The facilities were least likely to report performing a cesarean delivery (21 percent) or administering a blood transfusion (12 percent) during the period. As the table illustrates, union level public facilities and CCs do not provide blood transfusion and caesarean delivery services. Among the other facility types, the DHs and private hospitals were most likely to have transfused blood in an obstetric context and to have performed a cesarean delivery.

Table 7.8 also shows that 13 percent (17 percent excluding CCs) of facilities that offer normal delivery services performed the seven basic signal functions for emergency obstetric care in the three months before the survey and can be considered BEmONC facilities. One third of district and upazila public facilities (including 53 percent of DHs and 36 percent of UHCs), 32 percent of private hospitals, and 28 percent of NGO facilities performed the seven basic signal functions for emergency obstetric care and can be considered BEmONC facilities. Only one percent of union level facilities and no CCs qualified as BEmONC

facilities. One-third of urban facilities qualified as BEmONC facilities as compared with just 4 percent of rural facilities.

Only four percent (six percent excluding CCs) of facilities that offer normal delivery services can be considered CEmONC facilities, i.e., the facilities performed all nine signal functions for emergency obstetric care within the three months prior to the BHFS. Half (49 percent) of DHs that offer normal delivery services can be considered CEmONC facilities, while only six percent of MCWCs and five percent of UHCs qualify as CEmONC facilities. Very few private hospitals and NGO facilities (16 percent and nine percent, respectively) and no union level facilities or CCs that offer normal delivery are CEmONC facilities.



# Figure 7.4 Signal functions for emergency obstetric care, by facility type

# 7.5 READINESS OF HEALTH FACILITIES TO PROVIDE NORMAL DELIVERY SERVICES

The WHO assesses service readiness for normal delivery on the availability of specific items/tracer indicators in health facilities. In this section of the report, data from the 2014 BFHS are used to construct a slightly less restrictive and Bangladesh-context-appropriate version of the WHO measure. The measure of the readiness to provide normal delivery services includes the following 13 items/tracer indicators:

- **Trained staff**. At least one provider ever trained in the integrated management of pregnancy and childbirth (IMPAC)
- Guidelines. National or other BEmOC or CEmOC guideline available at the facility.
- Equipment.
  - Examination light.
  - Delivery pack.
  - Suction apparatus.
  - Neonatal bag and mask.
  - Partograph.
  - Gloves.
- Medicines and commodities.
  - Injectable oxytocin.
  - Injectable antibiotic.

- Magnesium sulphate.
- Skin disinfectant.
- Intravenous solution with infusion set.

Table 7.9 and Figure 7.5 show the availability of each of items/tracer indicators for assessing a health facility's readiness for normal delivery.

Table 7.9 Readiness of health facilities to provide normal delivery service

Among facilities that offer normal delivery services, the percentages with 13 readiness items by background characteristics, Bangladesh HFS 2014

Background characteristics	Guide- lines on BEmOC or CEmOC <sup>1</sup>	Staff trained in IMPAC at anytime <sup>2</sup>	Exami- nation light <sup>3</sup>	Delivery pack⁴	Suction appa- ratus	Neo- natal bag and mask	Parto- graph⁵	Gloves <sup>6</sup>	Inject- able utero- tonic oxytocin	Inject- able anti- biotic	Mag- nesium sulphate	Skin disin- fectant	Intra- venous fluids with infusion set	Percent- age having 13 items <sup>7</sup>	Number of facilities offering normal delivery services
Facility type															
District and upazila public facilities DH MCWC UHC	<b>40.5</b> 41.0 38.6 40.8	<b>56.0</b> 57.4 65.1 53.9	<b>82.1</b> 95.1 86.7 79.1	<b>80.5</b> 83.6 81.9 79.7	<b>75.7</b> 95.1 74.7 73.0	<b>79.5</b> 90.2 71.1 79.6	<b>47.3</b> 59.0 59.0 43.1	<b>87.8</b> 88.5 83.1 88.6	<b>64.1</b> 83.6 62.7 61.5	<b>69.3</b> 82.0 44.6 72.4	<b>38.7</b> 59.0 31.3 37.1	<b>47.1</b> 59.0 49.4 44.8	<b>74.9</b> 78.7 66.3 76.1	<b>7.5</b> 11.5 8.4 6.7	<b>45</b> 5 7 34
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>26.1</b> 34.2 19.9 30.0	<b>31.7</b> 35.8 28.8 33.2	<b>47.6</b> 51.9 43.5 54.3	<b>49.9</b> 60.9 46.5 32.2	<b>38.7</b> 33.5 38.5 56.2	<b>34.7</b> 31.5 37.8 29.9	<b>17.1</b> 14.3 19.0 16.4	<b>69.9</b> 67.6 73.5 59.7	<b>11.4</b> 16.8 6.8 16.3	<b>8.5</b> 18.6 0.2 16.4	<b>6.8</b> 8.8 5.7 6.1	<b>14.9</b> 16.2 15.5 8.2	<b>5.1</b> 7.4 2.0 12.5	<b>0.0</b> 0.0 0.0 0.0	<b>103</b> 36 55 12
Public community clinic (CC)	27.4	40.7	60.2	45.3	22.6	22.2	15.4	56.5	17.1	13.0	5.3	0.9	17.9	0.0	73
NGO clinic/ hospital	27.9	52.8	90.4	74.2	73.5	71.0	39.9	87.4	61.7	64.2	47.5	64.9	70.1	10.0	25
Private hospital	11.3	22.0	88.2	80.8	74.0	71.3	30.5	74.1	81.6	76.3	63.9	63.6	89.8	0.0	33
<b>Location</b> Urban Rural	24.1 28.4	42.0 37.4	87.3 55.9	76.8 52.3	77.7 35.4	74.9 34.4	40.3 18.9	81.6 67.1	68.8 19.9	70.7 16.7	51.4 9.8	58.6 13.4	80.5 17.0	3.2 1.7	82 198
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	32.7 26.0 25.8 21.2 10.8 56.2 20.5	23.7 33.0 45.0 37.0 35.9 43.9 34.2	43.7 55.0 67.9 74.0 46.8 93.5 72.2	54.8 49.5 60.8 47.1 58.3 89.8 52.1	41.6 49.1 55.1 56.2 28.2 49.8 32.4	48.9 43.6 47.2 51.3 28.7 62.9 44.2	26.7 17.8 29.6 29.2 13.6 35.1 22.1	83.2 66.2 59.2 82.0 63.2 98.2 96.1	21.0 29.7 36.3 33.2 30.4 46.8 34.0	21.2 33.1 41.5 20.8 28.9 24.3 30.6	5.6 17.3 27.2 17.5 24.5 20.8 26.4	20.6 30.4 25.7 37.7 15.8 28.7 27.9	24.1 31.7 40.2 33.2 33.9 37.1 36.9	1.1 3.1 2.1 1.9 1.2 3.2 0.0	15 58 97 25 35 33 18
Total	27.2	38.7	65.1	59.5	47.8	46.3	25.2	71.4	34.2	32.5	22.0	26.7	35.6	2.1	280
Total excluding CCs	27.1	38.0	66.8	64.5	56.7	54.8	28.6	76.6	40.3	39.4	27.9	35.8	41.8	2.9	207

<sup>1</sup> BEmOC (basic emergency obstetric care) guidelines, or CEmOC (comprehensive emergency obstetric care) guidelines.

<sup>2</sup> Facility has at least one interviewed staff member providing the service who reports receiving in-service training in IMPAC. The training must have involved structured sessions, and does not include individual instruction that a provider might have received during routine supervision.

<sup>3</sup> A functioning flashlight is acceptable.

<sup>4</sup> Either the facility had a sterile delivery pack available at the delivery site or all the following individual equipment must be present: cord clamp, episiotomy scissors, scissors (or blade) to cut cord, suture material with needle, and needle holder.

<sup>5</sup> A blank partograph at the service site.

<sup>6</sup> Disposable latex gloves or equivalent available at the service site.

<sup>7</sup> 1. Guideline on BEmOC or CEmOC. 2. At least one staff ever trained in IMPAC at any time. 3. Examination light. 4. Delivery pack. 5. Suction apparatus. 6. Neonatal bag and mask. 7. Partograph. 8. Gloves. 9. Injectable uterotonic oxytocin. 10. Injectable antibiotic. 11. Magnesium sulphate. 12. Skin disinfectant. 13. Intravenous fluids with infusion set.

A majority of facilities that offer normal delivery care has gloves (71 percent), the examination light (65 percent), and the delivery pack (60 percent). With other equipment, nearly half the facilities have a suction apparatus; a similar proportion has a neonatal bag and mask, but only a quarter have a partograph. The availability of guidelines on BEmOC or CEmOC and staff trained in IMPAC are generally low (27 percent and 39 percent, respectively). The availability of essential medicines and commodities ranges from 22 percent for magnesium sulphate to 36 percent for intravenous fluid with infusion sets. If CCs are excluded, the availability of all items/tracer indicators generally improves, although slightly.

Only 2 percent (3 percent excluding CCs) of facilities that offer normal delivery services can be considered ready to provide this service based on the modified WHO criteria. District and upazila public facilities (eight percent) and NGO facilities (10 percent) are more likely to be ready than other facilities. Surprisingly, none of the private hospitals is considered ready to offer quality normal delivery; the same is true for union level public facilities and CCs (Figure 7.6).









Note: Items for readiness of delivery services are: Ever trained staff in IMPAC, guidelines on BEmOC or CEmOC, equipment (examination light, delivery pack, suction apparatus, neonatal bag and mask, partograph, gloves), medicines and commodities (injectable oxytocin, injectable antibiotic, magnesium sulphate, skin disinfectant, intravenous solution with infusion set).

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# 7.6 BASIC MANAGEMENT AND ADMINISTRATIVE SYSTEMS

#### 7.6.1 Recent In-service Training and Supervision

Supportive management practices are an important component of ensuring quality delivery care. Table 7.10 presents information from the 2014 BFHS on two aspects of supportive management: provider supervision and training.

In-service training in maternal and newborn health care services not only improves the knowledge of delivery care providers but also improves their skills. Table 7.10 shows that 23 percent of delivery care providers had received in-service training related to delivery care during the 24 months before the BHFS. Providers in CCs (32 percent) and NGO facilities (30 percent) were most likely to have had recent in-service training while providers in private hospitals (13 percent) were least likely to have received recent training. Similar proportions of delivery care providers in urban (22 percent) and rural (24 percent) areas received in-service training during 24 months before the survey.

Among interviewed providers of normal d to their work and personal supervision du				
	Percentage of			
Background characteristics	Training related to delivery and/or newborn care during the 24 months preceding the survey <sup>1</sup>	Personal supervision during the 6 months preceding the survey <sup>2</sup>	Training related to delivery and/or newborn care during the 24 months and personal supervision during the 6 months preceding the survey	Number of interviewed providers of normal delivery or newborn care services
Facility type				
District and upazila public facilities DH MCWC UHC	<b>23.3</b> 24.9 27.2 22.4	<b>95.8</b> 95.0 98.4 95.7	<b>22.0</b> 24.1 26.5 21.0	<b>459</b> 80 39 341
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>23.0</b> 23.1 23.7 19.4	<b>92.4</b> 91.6 93.4 90.5	<b>19.7</b> 22.6 20.0 9.9	<b>231</b> 85 118 28
Public community clinic (CC)	31.6	99.4	31.6	151
NGO clinic/hospital	30.3	90.2	28.1	111
Private hospital	13.1	78.7	10.3	191
<b>Location</b> Urban Rural	22.4 24.3	88.9 95.8	20.2 22.8	597 547
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	23.2 27.2 23.7 29.3 10.6 17.0 28.7	91.4 92.7 88.7 92.8 97.8 96.2 96.2	21.5 25.9 21.2 25.9 10.6 15.5 27.7	65 215 445 122 108 115 74
Total	23.3	92.2	21.5	1,144
Total excluding CCs	22.0	91.1	19.9	993

<sup>1</sup> Training here refers only to in-service training. The training must have involved structured sessions, and does not include individual instruction that a provider might have received during routine supervision.

<sup>2</sup> Personal supervision refers to any form of technical support or supervision from a facility-based supervisor or from a visiting supervisor. It may include, but is not limited to, review of records and observation of work, with or without any feedback to the health worker.

Given the low percentage of providers reporting recent training, only one-fifth of delivery care providers had received recent training and supervision. Health care providers at CCs were the most likely to have received both in-service training and supervision recently, while providers at USCs/RDs and private hospitals were least likely to have received both these components of supportive management.

Supportive supervision helps to sustain providers' knowledge and skills. Table 7.10 shows that supervision of delivery care providers is common. With the exception of providers at private hospitals, 9 in 10 delivery care providers had received supervision during the six months before the survey. Providers at

CCs were most likely to have received recent supervision. Providers at rural facilities (96 percent) were somewhat more likely to have received recent personal supervision than providers at urban facilities (89 percent). When considering regional disparities, the proportion of providers who received recent supervision ranged from 89 percent in Dhaka to 98 percent in Rajshahi.

## 7.6.2 In-service Training in Delivery and Newborn Care by Topic

Table 7.11 presents information on specific in-service training related to newborn care that providers of normal delivery or newborn care services reported receiving. The results suggest that only a minority of delivery care providers have ever received in-service training in any of the areas related to delivery and newborn care, and very few had training in any of the areas in the 24 months before the survey. Providers were most likely to report ever receiving training on early and exclusive breastfeeding. However, less than one-third of interviewed providers of all facilities had ever received in-service training in this area. The providers were most likely to report ever receiving training in sterile cord cutting and care (29 percent) and least likely to have ever received training in newborn infection management. Eleven percent or less of providers had received training in any of the subject areas in the 24 months before the survey (Table 7.11).

#### Table 7.11 Training for providers of normal delivery services: Immediate newborn care

Among interviewed providers of normal delivery or newborn care services, percentages who report receiving in-service training on topics related to delivery and newborn care during the 24 months before the survey, by background characteristics, Bangladesh HFS 2014

		Percentage of interviewed providers of normal delivery or newborn care services who report receiving in-service training in:										
		Early and exclusive breastfeeding		Newborn infection management		Thermal care		d cutting care	Kangaroo mother care for low birth weight babies		Number of interviewed providers of	
Background characteristics	During the past 24 months	At any time	During the past 24 months	At any time	During the past 24 months	At any time	During the past 24 months	At any time	During the past 24 months	At any time	delivery or newborn care services	
Facility type												
District and upazila public facilities DH MCWC UHC	<b>10.9</b> 12.6 10.3 10.6	<b>34.3</b> 36.0 49.5 32.2	<b>5.6</b> 6.9 6.3 5.3	<b>22.3</b> 25.2 32.7 20.4	<b>7.7</b> 8.3 10.7 7.2	<b>25.5</b> 28.3 41.8 23.0	<b>9.8</b> 11.5 10.5 9.4	<b>30.8</b> 35.1 53.0 27.2	<b>8.1</b> 9.8 10.4 7.4	<b>25.8</b> 30.1 41.0 23.1	<b>459</b> 80 39 341	
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>8.9</b> 10.6 9.5 1.6	<b>35.4</b> 39.8 31.8 37.2	<b>5.7</b> 2.6 9.1 0.7	<b>15.5</b> 19.1 13.6 12.4	<b>6.9</b> 6.1 7.1 8.7	<b>24.0</b> 25.5 23.3 22.2	<b>11.8</b> 12.9 11.1 11.8	<b>36.1</b> 40.7 32.6 36.8	<b>8.0</b> 8.0 8.0 8.0	<b>24.0</b> 23.8 23.1 28.6	<b>231</b> 85 118 28	
Public community clinic (CC)	15.5	31.8	1.7	13.0	5.6	17.8	3.9	28.6	9.5	20.5	151	
NGO clinic/hospital	14.8	35.9	9.5	21.6	11.5	32.3	14.2	35.3	9.0	28.8	111	
Private hospital	8.0	12.7	9.3	13.8	3.6	7.9	7.8	10.6	7.4	10.0	191	
<b>Location</b> Urban Rural	10.8 11.3	28.0 33.7	7.8 4.2	20.2 15.9	7.3 6.6	21.9 21.9	9.9 9.1	26.0 31.5	8.0 8.5	21.1 23.8	597 547	
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	11.8 13.8 9.2 16.1 3.3 10.8 16.8	32.5 32.9 27.3 33.4 26.6 35.2 38.9	5.5 7.4 5.8 10.9 1.9 4.3 6.1	20.6 18.4 18.7 18.3 7.9 22.5 20.3	10.7 7.6 4.8 13.9 3.0 5.0 12.3	23.6 21.6 17.8 26.4 20.7 29.9 27.9	12.0 10.6 8.3 17.4 3.9 6.0 12.6	30.4 28.2 27.1 34.0 19.5 34.8 32.4	6.5 8.9 8.1 15.5 3.4 5.6 7.8	20.9 22.2 20.6 28.3 20.2 25.6 24.0	65 215 445 122 108 115 74	
Total	11.0	30.8	6.1	18.2	6.9	21.9	9.5	28.6	8.2	22.4	1,144	
Total excluding CCs	10.4	30.6	6.8	19.0	7.2	22.5	10.4	28.6	8.0	22.7	993	

Note: Training here refers only to in-service training. The training must have involved structured sessions, and does not include individual instruction that a provider might have received during routine supervision.

# **Key Findings**

- Overall, 18 percent (26 percent excluding community clinics (CCs)) of Bangladesh health facilities offer services for diabetes, and 16 percent (28 percent excluding CCs) provide diagnosis, prescribe treatment, or manage patients with cardiovascular diseases.
- District hospitals (95 percent) and upazila health complexes (UHCs) (81 percent) are more likely to provide services for diabetes and cardiovascular diseases when compared to the other facilities.
- About a quarter of all facilities have guidelines for the diagnosis and management of diabetes and cardiovascular diseases.
- Eighty percent or more of health facilities do not have at least one staff member recently trained to provide services for either diabetes or cardiovascular diseases.
- Most facilities are not prepared to provide quality services for diabetes or cardiovascular disease. In particular, facilities lack the essential medicines for treating either cardiovascular disease or diabetes.

# 8.1 BACKGROUND

on-communicable diseases (NCDs), which are also referred to as chronic diseases, make the largest contribution to mortality globally and in the majority of low- and middle-income countries. Worldwide, NCDs kill more than 36 million people each year. Cardiovascular diseases (CVDs) account for most NCD deaths, followed by cancers, respiratory diseases, and diabetes. Nearly eight of every ten deaths attributable to NCDs—about 29 million—occur in low- and middle-income countries (WHO 2013). These NCDs share four risk factors: tobacco use, physical inactivity, the harmful use of alcohol, and unhealthy diet. Since NCDs are a major contributor to poverty, they are an urgent development issue (WHO 2008).

Bangladesh is undergoing rapid demographic and epidemiological transitions, with the disease burden shifting from infectious, communicable diseases to NCDs (Karar et al. 2009). Despite their public health importance, NCDs in Bangladesh have been overshadowed by the country's focus on communicable diseases and maternal and child health. In terms of numbers of lives lost due to ill health, disability, and early death (disability-adjusted life years, or DALYS), NCDs (inclusive of injuries) account for 61 percent of the total disease burden in the country as compared with 39 percent from communicable diseases, maternal and child health, and nutrition combined (Engelgau 2011).

Given their impact, it is extremely important for the Bangladesh health care system to develop the capacity to appropriately diagnose and treat NCDs. Some of the key strategies for the management of NCDs in Bangladesh include prevention through raising awareness and advocating for policies that minimize exposure to risk factors for cardiovascular diseases; early diagnosis via hypertension screening; appropriate patient management through follow-up; and improved availability of diagnostic and medical supplies. Training is critical. The health workers in Bangladesh are not efficiently trained in NCD treatment in the primary health care system. Currently, NCD treatment is provided only at the tertiary level.

Major NCDs of Bangladesh include diabetes mellitus (DM), ischemic heart disease (IHD), hypertension (HTN), stroke, chronic respiratory disease, and cancer. This chapter assesses how well

Bangladesh's health care system is addressing two of the major NCDs: diabetes and cardiovascular disease (CVD).

Diabetes is defined by a fasting blood glucose level  $\geq$ 7.0 mmol/L (WHO 2006). Findings from the 2011 Bangladesh Demographic and Health Survey (BDHS) suggest that diabetes has become epidemic among the adult population of Bangladesh. An estimated 11 percent of the study participants had diabetes, and around 25 percent were considered to be pre-diabetic. According to the International Diabetes Federation (IDF), diabetes poses a daunting challenge to the sustainable development of Bangladesh. Nearly half of the population with diabetes is undiagnosed; among those diagnosed with diabetes, only 1 in 3 is treated, and roughly 1 in 13 achieves the recommended treatment targets (Latif et al. 2011).

Cardiovascular diseases have become a major, growing contributor to mortality and disability in South-East Asia and rank among the top ten causes of death in Bangladesh (Ghaffar et al. 2004, WHO 2004). According to the Bangladesh Bureau of Statistics (2008), cardiovascular disease causes 27 percentage of the deaths in Bangladesh. The 2010 Bangladesh Maternal Mortality and Health Care Survey (NIPORT et al. 2012) estimated that circulatory diseases are the second leading cause of death among women of reproductive age (13-49 years) in Bangladesh, and account for 16 percent of total deaths.

Using the information in the 2014 BHFS, this chapter addresses questions about the availability of services for diabetes and cardiovascular diseases. The chapter is organized as follows:

- **Diabetes.** Section 8.2, including Tables 8.1 and 8.2 and Figures 8.1 and 8.2, presents information on the availability of diabetes diagnostic and treatment services.
- **Cardiovascular diseases.** Section 8.3, including Tables 8.3 and 8.4 and Figures 8.3 and 8.4, presents information on the availability of cardiovascular disease diagnostic and/or treatment services.

# 8.2 AVAILABILITY OF SERVICES FOR DIABETES

#### 8.2.1 Service Provision

Integrating diabetes diagnosis and treatment into relevant health services increases the opportunities for case detection and treatment follow-up. In health facilities in Bangladesh, clients who seek health care specifically for symptoms of diabetes are usually seen in a general outpatient department (OPD). However, there are also specific diabetic clinics or service areas in some health facilities.

Table 8.1 presents information from the 2014 BHFS on the availability of diabetes services in Bangladesh health facilities. In addition, Table 8.1 and Figure 8.1 present information from the BHFS on several key measures of the readiness of facilities to provide quality diabetes services that include the availability of service guidelines, trained staff, and equipment for diabetes services.

#### Availability of Services for Diabetes

Table 8.1 shows that 18 percent (26 percent excluding CCs) of health facilities in Bangladesh diagnose, prescribe treatment for, and manage patients with diabetes. As expected, diabetes services are most likely to be available in district hospitals (DHs) (95 percent), private hospitals (80 percent), and UHCs (81 percent). Four of ten nongovernmental organization (NGO) facilities provide diabetes services.

In the Bangladesh context, CCs provide primarily screening and referral services for diabetes cases, while union level facilities typically provide diabetes services for pregnant mothers. As Table 8.1 shows, relatively few CCs (14 percent) or union level facilities (11 percent) reported having any services for diabetes available.
Urban facilities (57 percent) are more likely to offer diabetic services than rural facilities (14 percent). At the divisional level, facilities in Sylhet (24 percent) and Dhaka and Chittagong (both at 20 percent) are the most likely to offer diabetic services, while facilities in Barisal (9 percent) are the least likely to provide services.

### Service Guidelines

Availability of service guidelines does not necessarily translate into the use of the guidelines. However, the availability at least assures that, if needed, the guidelines will be available for easy reference. Among facilities that offer diabetes services, 26 percent (28 percent excluding CCs) had guidelines for the diagnosis and management of diabetes (Table 8.1 and Figure 8.1).

#### Table 8.1 Availability of diabetes services and guidelines, trained staff, and equipment for diabetes services

Among all facilities, the percentages that offer services for diabetes and, among facilities that offer services for diabetes, the percentages with guidelines, at least one staff member recently trained on diabetes, and the indicated equipment observed to be available at the service site on the day of the survey, by background characteristics, Bangladesh HFS 2014

			Percentage offering ser diabetes th	vices for		Equipment		
Background characteristics	Percentage of facilities offering services for diabetes <sup>1</sup>	Number of facilities	Guidelines for the diagnosis and management of diabetes	Trained staff <sup>2</sup>	Blood pressure apparatus <sup>3</sup>	Adult weighing scale	Height board or stadiometer	Number of facilities offering services for diabetes
Facility type								
District and upazila public facilities DH MCWC UHC	<b>70.7</b> 95.2 8.7 80.7	<b>47</b> 5 8 35	<b>41.0</b> 44.1 12.5 41.1	<b>13.8</b> 8.5 0.0 15.1	<b>93.7</b> 96.6 87.5 93.4	<b>74.4</b> 74.6 100.0 73.8	<b>55.6</b> 57.6 37.5 55.7	<b>34</b> 5 1 28
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>10.9</b> 10.0 7.5 16.0	<b>374</b> 149 117 108	<b>14.6</b> 8.3 31.0 11.7	<b>1.4</b> 1.3 3.4 0.5	<b>83.2</b> 80.3 78.2 88.2	<b>51.6</b> 47.1 78.2 41.7	<b>24.0</b> 18.6 21.8 29.9	<b>41</b> 15 9 17
Public community clinic (CC)	13.6	1,010	24.9	30.4	75.6	87.0	63.9	137
NGO clinic/hospital	42.3	81	34.9	12.5	100.0	82.8	59.3	34
Private hospital	80.2	36	21.3	11.8	98.0	74.0	40.0	29
<b>Location</b> Urban Rural	57.4 14.1	130 1,418	30.3 24.6	11.2 23.1	97.4 79.5	76.1 79.2	53.3 54.1	75 200
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	8.8 20.0 20.1 16.5 16.4 14.6 24.1	116 287 421 197 224 205 97	26.6 28.4 21.1 19.7 32.3 32.4 30.7	21.3 19.3 21.0 17.9 35.1 12.2 5.3	77.1 87.3 89.7 86.1 77.1 85.4 68.0	76.9 83.8 55.1 89.1 92.7 89.2 98.3	45.0 56.8 36.2 72.1 57.1 59.5 77.3	10 57 85 33 37 30 23
Total	17.7	1,548	26.2	19.9	84.3	78.3	53.9	275
Total excluding CCs	25.5	538	27.5	9.4	93.0	69.6	43.9	137

Note: The indicators presented in this table comprise the staff and training and equipment domains for assessing readiness to provide services for diabetes within the health facility assessment methodology proposed by WHO and USAID (2012).

<sup>1</sup> Providers in the facility diagnose, prescribe treatment for, or manage patients with diabetes.

<sup>2</sup> At least one interviewed provider of diabetes services reported receiving in-service training in diabetes services during the 24 months before the survey. The training must have involved structured sessions, and does not include individual instructions that a provider might have received during routine supervision. <sup>3</sup> Functioning digital blood pressure machine or manual sphygmomanometer with stethoscope.

## Trained Staff

One fifth (nine percent excluding CCs) of facilities that offer diabetes services had at least one staff member who had received in service training in diabetes services during the 24 months before the survey (Table 8.1 and Figure 8.1). Among public facilities, 30 percent of CCs, which mainly provide diabetes screening services, had staff members trained in diabetes services during the 24 months before the survey, as compared with 14 percent of district and upazila facilities and 1 percent of union facilities. Rural facilities (23 percent) were twice as likely as urban facilities (11 percent) to have trained staff. Rajshahi had the highest proportion of facilities with staff with recent in-service training for diabetes services (35 percent) while Sylhet had the lowest (five percent).

## Equipment

Among all facilities that offer diabetes services, 84 percent had a blood pressure apparatus, 78 percent had an adult weighing scale, and 54 percent had a height board available in the relevant service areas on the day of the visit (Table 8.1 and Figure 8.1). The CCs were least likely to have a blood pressure apparatus (76 percent) while union level facilities were the least likely to have a scale (52 percent) and a height board (24 percent).



Figure 8.1 Items to support quality provision of diabetes services

## 8.2.2 Availability of Diagnostic Capacity and Medicines for Diabetes

Tables 8.2 and Figure 8.2 present information from the 2014 BHFS on the availability of infrastructure and resources that support diabetes diagnostic and treatment services.

## Diagnostic Capacity

Among facilities that provide diabetes services, 25 percent (42 percent excluding CCs) had blood glucose testing capacity, 20 percent (40 percent excluding CCs) were able to conduct urine protein tests, and 19 percent (38 percent excluding CCs) offered urine glucose testing (Table 8.2 and Figure 8.2).

Private hospitals and NGO facilities were much more likely than public facilities to have the capacity to conduct all three tests (blood glucose, urine protein, and urine glucose). Union level public facilities did not provide any of the diagnostic tests. None of the CCs conducted urine protein tests, although a few offered blood glucose (eight percent) and urine glucose (one percent) testing.

Urban facilities were much more likely than rural facilities to offer diagnostic tests. Division level differences in diagnostic capacity showed Sylhet with the highest proportion of facilities that offer blood glucose testing (44 percent) and the lowest proportion that offer urine protein testing (nine percent).

#### Table 8.2 Diagnostic capacity and essential medicines for diabetes

Among facilities that offer services for diabetes, the percentages that indicated diagnostic capacity, and essential medicines observed at the service site on the day of the survey, by background characteristics, Bangladesh HFS 2014

	Di	agnostic capac	city		Med	icines		Number of
Background characteristics	Blood glucose <sup>1</sup>	Urine protein <sup>2</sup>	Urine glucose <sup>3</sup>	Metformin	Gliben- clamide	Injectable insulin	Injectable glucose solution	facilities offering services for diabetes
Facility type								
District and upazila								
public facilities	31.7	36.7	36.8	14.5	20.6	24.9	14.8	34
DH	52.5	49.2	49.2	39.0	25.4	47.5	33.9	5
MCWC	0.0	0.0	0.0	0.0	12.5	12.5	0.0	1
UHC	28.8	35.3	35.5	10.5	19.9	21.2	11.9	28
Union level public								
facilities	0.0	0.0	0.0	-	-	-	-	41
UHFWC	0.0	0.0	0.0	-	-	-	-	15
UHFWC (upgraded)	0.0	0.0	0.0	-	-	-	-	9
USC/RD	0.0	0.0	0.0	-	-	-	-	17
Public community clinic(CC)	8.3	0.0	0.9	-	-	-	-	137
NGO clinic/hospital	67.6	60.1	56.5	12.8	2.4	11.7	7.9	34
Private hospital	83.3	76.3	70.3	61.5	36.6	65.5	48.0	29
Location								
Urban	61.3	58.8	56.6	31.2	20.9	37.1	27.2	75
Rural	11.6	5.4	5.4	1.8	1.3	1.9	0.5	200
Division								
Barisal	20.4	14.0	13.2	8.6	7.2	16.0	5.8	10
Chittagong	20.7	21.2	22.0	10.4	8.0	8.7	6.1	57
Dhaka	29.9	28.8	26.1	16.1	10.8	18.0	14.0	85
Khulna	16.9	16.2	16.2	6.0	4.6	8.5	7.2	33
Rajshahi	22.9	13.6	11.2	2.8	3.2	11.5	1.6	37
Rangpur	18.9	14.9	14.7	5.8	2.0	4.0	5.2	30
Sylhet	43.5	8.5	14.0	7.3	2.3	6.8	4.0	23
Total	25.1	19.9	19.3	9.8	6.7	11.5	7.8	275
Total excluding CCs	42.0	39.8	37.8	19.5	13.3	23.0	15.6	137

Note: The indicators presented in this table comprise the diagnostics and medicines and commodities domains for assessing readiness to provide services for diabetes within the health facility assessment methodology proposed by WHO and USAID (2012). "-" Means union and community level public facilities have no provision for providing metformin, glibenclamide, injectable insulin, or injectable glucose

"-" Means union and community level public facilities have no provision for providing metformin, glibenciamide, injectable insulin, or injectable glucose solution.

<sup>1</sup> Facility had a functioning glucometer and unexpired glucose test strips in the facility on the day of the survey or the facility has a blood chemistry analyzer observed and functioning.

<sup>2</sup> Facility had unexpired urine dipsticks for testing for urine protein available in the facility on the day of the survey.

<sup>3</sup> Facility had unexpired urine dipsticks for testing for urine glucose available in the facility on the day of the survey.

## Medicines

Overall, few facilities that offer diabetes services had the essential medicines for treating diabetes available. Only 10 percent (20 percent excluding CCs) of facilities that offer diabetes services had metformin available on the day of the visit, and only seven percent (13 percent excluding CCs) had glibenclamide. Twelve percent (23 percent excluding CCs) of facilities had injectable insulin, and 8 percent (16 percent excluding CCs) had injectable glucose solution (Table 8.2 and Figure 8.2). Because the medicines for diabetes require a prescription from a physician, the CCs and union level public facilities that offer diabetes services do not have the capacity to offer medications for treating the illness. Among the other facilities, private hospitals and DHs were more likely to have medicines for management of diabetes than maternal and child welfare centers (MCWCs), UHCs, and NGO facilities.

As expected, urban facilities are more likely to be equipped with essential medicine than rural facilities. Facilities in Rajshahi were the least likely to have oral medication for diabetes such as metformin (three percent), facilities in Rangpur and Sylhet were least likely to have glibenclamide (two percent each), and facilities in Rangpur were the least likely to have any injectable insulin available (four percent).



*Figure 8.2* Diagnostic capacity and medicines to support quality provision of diabetes services

## 8.3 AVAILABILITY OF SERVICES FOR CARDIOVASCULAR DISEASES

## 8.3.1 Service Provision

Table 8.3 and Figure 8.3 provide information from the 2014 BHFS on the availability of services for cardiovascular diseases. The table also presents information on the availability of service guidelines, trained staff, and equipment that support the provision of quality services for cardiovascular disease.

## Availability of Services for Cardiovascular Disease

Table 8.3 shows that 16 percent (28 percent excluding CCs) of all health facilities are able to diagnose, prescribe treatment for, and manage patients with cardiovascular diseases. The DHs (95 percent) UHCs (81 percent), and private hospitals (77 percent) are more likely to provide services for cardiovascular diseases than other facilities. Only 10 percent of CCs and MCWCs and 17 percent of union level facilities provide any cardiovascular services, and the services at these facilities are limited to the measurement of blood pressure or referrals.

Over half of urban facilities provide services for cardiovascular diseases as compared with 13 percent of rural facilities. Sylhet (24 percent) had the highest proportion of facilities that offer services for cardiovascular diseases and the lowest was found in Rangpur (10 percent).

## Service Guidelines

Twenty three percent (22 percent excluding CCs) of facilities that offer services for cardiovascular diseases had guidelines for the diagnosis and management of these diseases available at the service site on the day of the survey (Table 8.3 and Figure 8.3). The DHs (37 percent), UHCs (35 percent), and NGO facilities (30 percent) were most likely to have guidelines available. Guidelines were much more widely available in facilities in Rangpur (56 percent) than in facilities in the other divisions.

#### Table 8.3 Guidelines, trained staff, and equipment for cardiovascular diseases

Among all facilities, the percentages that offer services for cardiovascular diseases and, among facilities that offer services for cardiovascular diseases, the percentages with guidelines, at least one staff member recently trained on cardiovascular diseases, and the indicated equipment observed to be available at the service site on the day of the survey, by background characteristics, Bangladesh HFS 2014

			offering so cardiovascu	e of facilities ervices for lar diseases have:		Equipment		
Background characteristics	Percentage of facilities offering services for cardio- vascular diseases <sup>1</sup>	Number of facilities	Guidelines for diagnosis and management of cardio- vascular diseases	Trained staff <sup>2</sup>	Stethoscope	Blood pressure apparatus <sup>3</sup>	Adult scale	Number of facilities offering services for cardio- vascular diseases
Facility type								
District and upazila public facilities DH MCWC UHC	<b>71.0</b> 95.2 9.8 80.8	<b>47</b> 5 8 35	<b>34.6</b> 37.3 11.1 34.7	<b>20.1</b> 16.9 0.0 21.2	<b>98.2</b> 98.3 88.9 98.4	<b>93.8</b> 96.6 88.9 93.4	<b>74.5</b> 74.6 100.0 73.9	<b>34</b> 5 1 28
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>16.6</b> 16.0 11.3 23.2	<b>374</b> 149 117 108	<b>15.2</b> 18.5 22.0 8.5	<b>2.9</b> 2.4 2.2 3.8	<b>91.0</b> 91.3 85.6 93.7	<b>85.9</b> 80.0 85.6 91.8	<b>57.5</b> 57.8 68.8 51.1	<b>62</b> 24 13 25
Public community clinic(CC)	9.6	1,010	24.3	14.0	93.3	80.9	91.4	97
NGO clinic/hospital	36.5	81	29.8	10.4	100.0	100.0	82.0	30
Private hospital	77.0	36	15.1	6.9	97.9	97.9	75.0	27
<b>Location</b> Urban Rural	54.5 12.6	130 1,418	23.3 23.0	12.1 10.4	98.7 93.1	97.2 84.4	75.6 78.6	71 179
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	17.2 20.1 16.2 18.9 10.5 9.7 23.9	116 287 421 197 224 205 97	11.8 24.5 14.1 17.0 26.6 56.0 33.6	5.5 18.0 5.6 8.0 21.5 1.1 15.7	93.4 95.6 88.8 99.2 96.9 96.3 100.0	87.7 94.9 85.3 87.9 80.6 96.3 79.6	86.4 83.7 55.6 88.9 88.6 80.1 90.3	20 58 68 37 24 20 23
Total	16.1	1,548	23.1	10.9	94.7	88.0	77.8	250
Total excluding CCs	28.4	538	22.3	8.9	95.6	92.5	69.1	153

Note: The indicators presented in this table comprise the staff and training and equipment domains for assessing readiness to provide services for cardiovascular diseases within the health facility assessment methodology proposed by WHO and USAID (2012).

<sup>1</sup> Providers in the facility diagnose, prescribe treatment for, or manage patients with cardiovascular diseases.

<sup>2</sup> At least one interviewed provider of cardiovascular diseases services reported receiving in-service training in cardiovascular diseases during the 24 months preceding the survey. The training must have involved structured sessions and does not include individual instruction that a provider might have received during routine supervision. <sup>3</sup> Functioning digital BP machine or manual sphygmomanometer with stethoscope.

## Trained Staff

Among facilities that offer services for cardiovascular diseases, 11 percent (9 percent excluding CCs) had at least one staff member who received in service training in cardiovascular disease during the 24 months before the survey (Table 8.3 and Figure 8.3). The UHCs (21 percent), DHs (17 percent) and CCs (14 percent) were more likely than NGO facilities (10 percent) and private hospitals (seven percent) to have at least one staff member with recent training. Union level public facilities were the least likely to have trained staff (three percent). Facilities that offer cardiovascular disease services were more likely to have staff with recent training in Rajshahi (22 percent) and Chittagong (18 percent) than other divisions.

## Equipment

Overall, 95 percent (96 percent excluding CCs) of facilities that offer services for cardiovascular diseases had a stethoscope, 88 percent (93 percent excluding CCs) had a blood pressure apparatus, and 78 percent (69 percent excluding CCs) had an adult weighing scale available in the relevant service sites (Table 8.3 and Figure 8.3). Variations in the availability of these items by location and division are minor. However, rural facilities (84 percent) are less likely than urban facilities (97 percent) to have a blood pressure apparatus available and only around half of facilities in Dhaka have an adult scale as compared to 80 percent or more facilities in the other divisions.



*Figure 8.3* Items to support quality provision of services for cardiovascular diseases (CVDs)

## 8.3.2 Availability of Medicines and Commodities for Cardiovascular Diseases

The 2014 BHFS collected data on the availability of essential medicines and commodities to support the treatment of patients with cardiovascular diseases. Table 8.4 and Figure 8.4 show that beta blockers and calcium channel blockers (amlodipine/nifedipine) are the most widely available of the medicines considered essential for the treatment of cardiovascular diseases. Among facilities that offer cardiovascular disease services, 22 percent (33 percent excluding CCs) had beta blockers available on the day of the survey visit, and 20 percent (30 percent excluding CCs) had calcium channel blockers. By comparison, 12 percent (18 percent excluding CCs) of facilities that offer cardiovascular disease services had aspirin, six percent (10 percent excluding CCs) had thiazide diuretics, and 6 percent (9 percent excluding CCs) had angiotensinconverting enzyme (ACE) inhibitors (enalapril). Just over one quarter (42 percent excluding CCs) of the facilities had oxygen in either cylinders or concentration, or an oxygen distribution system.

Except for beta blockers, private hospitals were more likely to have essential medicines than the other types of facilities, and were also more likely to have oxygen (Table 8.4). Among public facilities, as expected, the DHs were most likely to have the essential medicines and oxygen. Because a prescription is needed from a physician, CCs and union level public facilities are not able to offer anti-hypertensive medications.

#### Table 8.4 Availability of essential medicines and commodities for cardiovascular diseases

Among facilities that offer services for cardiovascular diseases, the percentages with essential medicines and commodities observed at the service site on the day of the survey, by background characteristics, Bangladesh HFS 2014

	Percentage of	facilities offer	ring services for ca medicines and		ases that have	the indicated	Number of
Background characteristics	ACE inhibitors (enalapril)	Thiazide	Beta blockers (atenolol)	Calcium channel blockers (amlodipine/ nifedipine)	Aspirin	Oxygen <sup>1</sup>	facilities offering services for cardiovascular diseases
Facility type							
District and upazila public facilities DH MCWC UHC	<b>8.4</b> 16.9 0.0 7.1	<b>7.3</b> 18.6 0.0 5.5	<b>60.3</b> 71.2 0.0 60.0	<b>39.2</b> 64.4 11.1 35.6	<b>24.0</b> 42.4 11.1 21.2	<b>78.0</b> 86.4 55.6 77.1	<b>34</b> 5 1 28
Union level public facilities UHFWC UHFWC (upgraded) USC/RD			- - -	- - -	- - -		<b>62</b> 24 13 25
Public community clinic(CC)	-	-	-	-		-	97
NGO clinic/hospital	4.7	10.3	28.5	31.7	8.8	49.4	30
Private hospital	36.6	37.7	64.9	75.1	57.4	87.1	27
<b>Location</b> Urban Rural	19.4 0.3	19.8 1.0	54.4 8.8	51.3 7.2	33.8 3.9	74.5 6.7	71 179
<b>Division</b> Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	1.9 5.6 11.4 3.0 1.5 4.5 2.1	4.2 4.4 10.8 5.5 1.9 5.6 6.5	42.2 18.0 29.3 13.4 17.7 17.9 11.8	34.0 13.9 30.4 9.6 17.1 19.8 9.4	28.3 8.2 20.6 5.5 12.5 4.9 2.5	13.8 24.8 39.7 12.5 27.9 29.6 15.1	20 58 68 37 24 20 23
Total	5.7	6.3	21.8	19.7	12.4	25.9	250
Total excluding CCs	9.3	10.4	33.2	29.9	17.9	42.4	153

Note: The indicators presented in this table comprise the medicines and commodities domain for assessing readiness to provide services for cardiovascular diseases within the health facility assessment methodology proposed by WHO and USAID (2012). "-" Means union and community level public facilities have no provision of providing ACE inhibitors (enalapril), thiazide, beta blockers (atenolol), calcium channel blockers (amlodipine/nifedipine), aspirin or oxygen.

<sup>1</sup> In cylinders or concentrators or an oxygen distribution system.



# *Figure 8.4* Medicines and commodities to support quality provision of services for cardiovascular diseases

## Key Findings

- Nine percent of all facilities offer any tuberculosis (TB) diagnostic services, and only five percent of all facilities provide any TB treatment and/or TB treatment follow-up services.
- TB services are provided primarily at district hospitals (DHs) (94 percent), upazila health complexes (UHCs) (93 percent), and private hospitals (62 percent).
- Among facilities that offer TB services, 43 percent have TB guidelines available.
- Only 13 percent of facilities that offer TB services have TB rapid diagnostic test kits, and only five percent have culture medium for diagnosing TB.
- One-third of facilities that offer TB services have first-line medicines for treating TB. Less than half of the facilities have at least one provider who ever received in-service training related to TB.
- Based on World Health Organization (WHO) criteria, only 26 percent of DHs, 21 percent of UHCs, and 15 percent of nongovernmental organizations (NGOs) that offer any TB services are considered ready to provide TB services. No private hospitals were considered ready.

## 9.1 BACKGROUND

Tuberculosis (TB) is a serious health problem in Bangladesh. According to WHO estimates, the TB incidence rate in Bangladesh was 224 per 100,000 population in 2013, and the prevalence rate was 402 per 100,000 population. The mortality rate from TB was estimated at 51 per 100,000 individuals in the same year (WHO 2013). Bangladesh is also one of the 27 high burden countries for multiple-drug resistant TB (MDR-TB). In Bangladesh, 1.4 percent of new tuberculosis patients, and 29 percent of previously treated tuberculosis patients are estimated to have MDR-TB (WHO 2013).

The Mycobacterial Disease Control (MBDC) unit of the Directorate-General of Health Services (DGHS) oversees the National Tuberculosis Control Program (NTP). The NTP introduced the Directly Observed Treatment, Short-course (DOTS) strategy in 1993; since 2006, NTP has been implementing the Stop TB Strategy (Annual TB Report 2013). Under the NTP, TB diagnostic and treatment services are available free of charge in public and private facilities throughout the country. The goal is to reduce morbidity, mortality, and transmission of TB until it is no longer a public health problem.

This chapter provides an overview of services for TB in Bangladesh health facilities, and highlights the key aspects of TB-related client services, including the availability of diagnostic capacity, trained staff, and medicines. The chapter is organized as follows:

- Availability of TB services. Section 9.2, including Tables 9.1 and 9.2 and Figure 9.1, presents information on the availability of TB diagnostic and/or treatment services in Bangladesh.
- **Readiness of health facilities.** Section 9.3, including Tables 9.3 and Figures 9.2 and 9.3, provides information on the availability of WHO recommended items/tracer indicators that are necessary to offer quality TB services.

## 9.2 AVAILABILITY OF TB SERVICES

## 9.2.1 Service Provision

Achieving effective TB control requires concerted efforts at all levels. Table 9.1 and Figure 9.1 present information from the BHFS on several key measures of the preparedness of facilities that offer TB diagnosis and treatment services to provide those services.

## Availability of TB Services

Only 10 percent (18 percent excluding community clinics (CCs)) of health facilities offer some form of TB services, e.g., TB diagnosis, treatment, or treatment follow-up services (Table 9.1 and Figure 9.1). A large proportion of DHs (94 percent) and UHCs (93 percent) offer TB services. In contrast, only five percent of USCs/RDs and CCs do so. Six out of 10 private hospitals and two out of 10 NGO facilities provide TB diagnosis, treatment, and/or TB treatment follow-up services.

As shown in Table 9.1, nine percent (17 percent excluding CCs) of all health facilities offer any TB diagnostic services. Among public sector facilities, DHs (94 percent) and UHCs (92 percent) are more likely than any other facility types to provide TB diagnostic services. Six of ten private hospitals and two of ten NGO facilities provide TB diagnostic services.

Five percent (11 percent excluding CCs) of health facilities offer TB treatment and/or TB treatment follow-up services. The TB treatment and/or TB treatment follow-up services are much more likely to be available in UHCs (86 percent) and DHs (63 percent) than in other types of facilities. Five percent or less of other public facilities, six percent of private hospitals, and 12 percent of NGO facilities provide these services.

More than a quarter of urban health facilities offer TB treatment and/or TB treatment follow-up services, whereas the availability is very low in rural facilities (three percent). Divisional differences in the availability of TB treatment and/TB treatment follow-up services are generally small.

#### Table 9.1 Availability of tuberculosis services, guidelines, and trained staff for tuberculosis services

Among all facilities, the percentages that offer any tuberculosis (TB) diagnostic services or any treatment and/or treatment follow-up services and, among facilities that offer any TB services, the percentages with TB guidelines and at least one staff member recently trained in TB services, by background characteristics, Bangladesh HFS 2014

	Perc	entage of all	facilities off	ering:	_	Percentage	e of facilities of that have gu				Number of facilities offering
Background characteristics	Screening and referral for TB diagnosis <sup>1</sup>	Any TB diagnostic services <sup>2</sup>	Any TB treatment and/or treatment follow-up services <sup>3</sup>	Any TB diagnostic, treatment and/or treatment follow-up services	Number of facilities	Diagnosis and treatment of TB	Diagnosis and treatment of MDR-TB	Manage- ment of HIV and TB co- infection	TB infection control	Trained staff⁴	any TB diagnostic, treatment and/or treatment follow-up services
Facility type											
District and upazila public facilities DH MCWC UHC	<b>47.6</b> 48.4 0.0 58.0	<b>77.8</b> 93.5 3.3 91.8	<b>70.0</b> 62.9 1.1 86.1	<b>78.8</b> 93.5 3.3 93.1	<b>47</b> 5 8 35	<b>76.9</b> 60.3 0.0 79.9	<b>49.4</b> 31.0 0.0 52.5	<b>17.6</b> 25.9 0.0 16.5	<b>38.2</b> 39.7 33.3 38.1	<b>37.8</b> 37.9 33.3 37.8	<b>37</b> 5 0∗ 32
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>1.7</b> 1.2 1.2 2.9	<b>4.8</b> 3.6 6.8 4.4	<b>3.1</b> 1.2 3.9 4.9	<b>5.2</b> 3.6 7.3 5.0	<b>374</b> 149 117 108	<b>55.4</b> 56.0 46.7 68.5	<b>28.6</b> 0.0 46.7 28.3	<b>10.7</b> 13.2 16.0 0.0	<b>33.1</b> 69.8 22.5 13.6	<b>0.0</b> 0.0 0.0 0.0	<b>19</b> 5 9 5
Public community clinic (CC)	3.7	5.0	1.7	5.3	1,010	16.5	10.5	0.0	18.8	39.3	53
NGO clinic/hospital	10.3	19.2	12.0	19.9	81	34.4	29.3	17.7	30.3	43.3	16
Private hospital	7.7	61.5	5.8	61.5	36	5.2	5.2	5.2	10.4	21.0	22
<b>Location</b> Urban Rural	19.2 3.7	47.0 5.8	26.3 2.8	47.4 6.1	130 1,418	40.8 34.4	28.1 21.0	14.1 4.5	26.7 24.8	31.5 31.5	62 86
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	2.6 5.0 7.8 5.6 1.6 3.9 4.0	8.5 10.6 11.9 9.9 5.9 6.1 7.8	5.0 5.8 5.6 3.6 2.8 5.1 3.5	11.2 10.9 11.9 10.4 5.9 6.1 7.8	116 287 421 197 224 205 97	29.4 31.6 34.5 30.1 35.5 83.5 34.8	12.8 16.2 36.9 10.9 15.3 34.0 23.3	3.2 5.2 10.4 5.1 10.4 19.5 7.0	55.4 14.9 24.1 9.5 50.4 33.8 14.1	8.6 19.7 59.1 13.0 23.8 2.4 48.1	13 31 50 20 13 13 8
Total	5.0	9.3	4.8	9.6	1,548	37.1	23.9	8.5	25.6	31.5	148
Total excluding CCs	7.4	17.2	10.5	17.6	538	48.7	31.5	13.3	29.4	27.1	95

Note: The guidelines and trained staff indicators presented in this table comprise the staff and training domain for assessing readiness to provide TB services within the health facility assessment methodology proposed by WHO and USAID (2012).

MDR-TB = multi-drug resistance tuberculosis

\* Based on the weighted rounded number.

<sup>1</sup> Facility reports that it refers clients outside the facility for TB diagnosis, and there is documentation on the day of the survey visit to support the contention. <sup>2</sup> Facility reports that providers in the facility make a diagnosis of TB by using any of the following methods: sputum smear only, X-ray only, either sputum or X-ray, both sputum and X-ray, or based on clinical symptoms only; or the facility reports that they refer clients outside the facility for TB diagnosis, and a register was observed that indicates clients who had been referred for TB diagnosis.

<sup>3</sup> Facility reports that they follow one of the following TB treatment regimens or approaches:

-Directly observe for two months and follow-up for four months.

-Directly observe for six months.

-Follow up clients only after the first two months of direct observation elsewhere.

-Diagnose and treat clients while in the facility as inpatients, and then discharge elsewhere for follow-up. -Provide clients with the full treatment with no routine direct observation phase.

-Diagnose, prescribe, or provide medicines with no follow-up.

-Diagnose only, no treatment.

At least one interviewed provider of any one of the following TB services reported receiving in-service training relevant to the particular TB service during the 24 months before the survey: TB diagnosis and treatment; management of HIV and TB co-infection; MDR TB treatment, identification of need for referral; DOTS treatment; or TB infection control. The training must have involved structured sessions, and does not include individual instruction that a provider might have received during routine supervision.

## *Figure 9.1* Availability of TB diagnostic, treatment and/or treatment follow-up services in health facilities, by facility type



## Guidelines

Guidelines for the diagnosis and treatment of TB are expected to be available at all TB diagnosis and treatment sites. However, most facilities that provide TB services did not have guidelines on the day of the survey visit. Overall, guidelines for the diagnosis and treatment of TB were present in 37 percent (49 percent excluding CCs) of health facilities that offer any TB services (Table 9.1). Guidelines for the diagnosis and treatment of MDR-TB were available in 24 percent (32 percent excluding CCs) of facilities, while nine percent (13 percent excluding CCs) of facilities that offer any TB services had guidelines for the management of HIV and TB co-infection. As expected, district and upazila public facilities were more likely to have these guidelines as compared with other types of facilities.

About one in four facilities that offer any TB services (29 percent excluding CCs) had guidelines for TB infection control available on the day of survey visit (Table 9.1). Among district and upazila facilities that offer TB services, 38 percent had such guidelines compared with 33 percent of union level facilities that offer TB services. The UHFWCs, at 70 percent, were the most likely to have TB infection control guidelines.

## Trained Staff

Three out of ten facilities that offer TB services had at least one provider who had received inservice training in TB services during the 24 months before the survey (Table 9.1). Among public facilities, around four in 10 CCs and district and upazila facilities had a provider with recent in-service training, while no union level facilities had recently trained staff. Forty-three percent of NGO facilities that offer TB services have at least one staff with recent training as compared with 21 percent of private hospitals.

## 9.2.2 Availability of Diagnostic Capacity and Medicines for TB Treatment

The 2014 BHFS assessed the availability of TB diagnostic capacity and medicines for TB treatment in facilities that offered any TB services, i.e., diagnosis, treatment and/or treatment follow-up services. Table 9.2 presents the results of the assessment of these components of TB services.

## Diagnostic Capacity

Early case detection and diagnosis are critical for TB control. Only a minority of facilities that offer TB services had the supplies and/or equipment necessary for any method of TB diagnosis on the day of the

survey visit (Table 9.2). The most common systems for TB diagnosis were x-ray, available in 21 percent (33 percent excluding CCs) of facilities that offer TB services, and TB smear microscopy available in 17 percent (27 percent excluding CCs) of facilities. Thirteen percent (20 percent excluding CCs) of facilities had TB rapid diagnostic test kits, and five percent (seven percent excluding CCs) of facilities had culture medium for diagnosing TB.

#### Table 9.2 Diagnostic capacity and availability of medicines for tuberculosis treatment

Among facilities that offer any tuberculosis (TB) diagnostic, treatment, and/or treatment follow-up services, the percentages that have TB and HIV diagnostic capacity and medicines for TB treatment available in the facility on the day of the survey, by background characteristics, Bangladesh HFS 2014

	Percentag		that have the the the stic capacity:	e following		e of facilities have:		ge of facilities owing medic treating TB:	ines for	Number of facilities offering any TB
Background characteristics	TB smear micro- scopy <sup>1</sup>	Culture medium <sup>2</sup>	TB rapid diagnostic test kits	TB x-ray	HIV diagnostic capacity <sup>3</sup>	System for diagnosing HIV among TB clients <sup>4</sup>	First-line treatment for TB <sup>5</sup>	Injectable strepto- mycin	Isoniazid and thiace- tazone tablets	diagnostic,
Facility type										
District and upazila facilities DH MCWC UHC	<b>36.0</b> 41.4 - 35.4	<b>10.7</b> 24.1 - 8.8	<b>26.0</b> 39.7 - 24.2	<b>30.1</b> 72.4 - 23.8	<b>7.0</b> 10.3 - 6.6	<b>8.9</b> 6.9 - 9.3	<b>83.8</b> 60.3 - 87.7	<b>57.5</b> 36.2 - 61.1	<b>39.7</b> 39.7 - 40.0	<b>37</b> 5 32
Union level facilities	-	0.0 -	-	-	0.0 -	9.5 -	52.7	23.6	40.0 <b>20.5</b>	19
UHFWC UHFWC (upgraded)	-	-	-	-	-	-	32.7 46.7	17.5 16.0	19.5 0.0	5 9
US/RD	-		-	-	-		40.7 81.9	41.7	53.6	5
Public community clinic (CC)	-	-	-	-	-	-	6.8	0.0	0.0	53
NGO clinic/ hospital	20.7	3.5	15.8	7.3	8.1	7.6	52.4	40.9	26.2	16
Private hospital	38.4	10.1	29.8	83.7	12.8	6.9	1.7	0.0	0.0	22
<b>Location</b> Urban Rural	31.9 6.4	8.9 1.5	23.9 4.7	46.4 2.5	9.8 0.9	7.4 1.7	48.6 27.8	35.6 12.3	26.9 7.4	62 86
Division Barisal Chittagong Dhaka Khulna Rajshahi Rangpur Sylhet	11.1 11.2 24.6 16.7 17.4 12.8 8.0	2.7 3.9 5.0 6.4 0.0 9.7 2.4	11.2 12.1 12.7 11.3 10.4 24.5 5.7	8.3 19.6 28.0 22.1 17.2 7.8 23.3	1.4 0.0 6.3 6.8 4.9 11.4 0.0	0.6 0.3 6.0 4.7 4.9 10.1 0.0	19.6 33.8 31.7 23.7 45.2 88.2 40.8	5.8 16.7 29.7 7.6 31.8 26.3 36.1	2.7 14.4 16.2 6.2 25.6 33.3 16.1	13 31 50 20 13 13 8
Total	17.0	4.6	12.7	20.8	4.6	4.1	36.4	22.0	15.5	148
Total excluding CCs	26.6	7.2	19.8	32.5	7.2	6.4	53.1	34.4	24.3	95

Note: The indicators presented in this table comprise the diagnostics and medicines and commodities domains for assessing readiness to provide services for TB within the health facility assessment methodology proposed by WHO and USAID (2012). "-" Means facility types do not have the specific diagnostic capacity or medicines.

<sup>1</sup> Functioning microscope, slides, and all stains for Ziehl-Neelson test (carbol-fuchsin, sulphuric acid, and methylene blue) all were available in the facility on the day of the survey visit.

<sup>2</sup> Solid or liquid culture medium, e.g., MGIT 960.

<sup>3</sup> HIV rapid diagnostic test kits available in TB service area.

<sup>4</sup> Record or register that indicates TB clients who had been tested for HIV.

<sup>5</sup> Four-drug fixed-dose combination (4FDC) available, or else isoniazid, pyrazinamide, rifampicin, and ethambutol are all available, or a combination of these medicines, to provide first-line treatment.

The limited availability of TB diagnostic services is not unexpected since MCWCs, CCs and union level facilities do not have any provision for TB diagnostic services. However, even in facilities that might be expected to have diagnostic capacity, resources are limited. Only a minority of DHs, UHCs, NGO facilities, and private hospitals that provide TB services have the capacity for any of the methods of TB diagnosis except TB x-ray, which is mainly available in DHs (72 percent) and private hospitals (84 percent).

As expected, facilities in urban areas are better equipped for diagnosing TB than rural facilities. There is considerable variability in TB diagnostic capacity across divisions. Facilities in Dhaka have the greatest availability of x-ray services (28 percent) and TB smear microscopy (25 percent). Facilities in Rangpur are more likely than facilities in other divisions to have TB rapid diagnostic test kits (25 percent) or to diagnose TB through culture medium (10 percent).

## Availability of Medicines

The availability of medicines for treating TB is generally limited in health facilities in Bangladesh. On the day of the visit, 36 percent (53 percent excluding CCs) of facilities that offer TB services had firstline medicines for treating TB (any combination of pyrazinamide, rifampicin, ethambutol, and isoniazid); 22 percent had injectable streptomycin; and 16 percent had isoniazid and thiacetazone tablets (Table 9.2). District and upazila facilities were more likely to have the medicines than union level and NGO facilities. Only two percent of private hospitals that offer TB services had first-line treatment medications available, and none had injectable streptomycin or isoniazid and thiacetazone tablets. As expected, urban facilities had higher availability of all types of medication than facilities in rural areas. There was considerable variability in the availability of medications by division. Most notable was the very high percentage of facilities in Rangpur that offer the first line treatment for TB (88 percent).

## 9.3 READINESS OF HEALTH FACILITIES TO PROVIDE TB SERVICES

The WHO recommends assessing the readiness to provide TB services based on availability of specific items/tracer indicators. In this section of the report, data from the 2014 BFHS are used to construct a slightly less restrictive and Bangladesh-context-appropriate version of the WHO measure. The measure includes the following four items/tracer indicators:

- Trained staff. At least one provider ever receiving in-service training on TB.
- Guidelines. Any guideline for TB.
- **Diagnostic capacity.** TB microscopy.
- Medicines. First-line TB medicines.

Table 9.3 and Figures 9.2 and 9.3 present information on the availability of these items/indicators at health facilities that offer TB services. Facilities that provide TB services were most likely to have trained staff (46 percent) and guidelines (43 percent). However, both the availability of trained staff and guidelines varied widely by facility type. District and upazila facilities (68 percent) were most likely and union level facilities were the least likely (11 percent) to have trained staff. Eight in ten district and upazila facilities and more than half of union facilities had TB guidelines. The availability of TB guidelines was much lower in CCs (27 percent), NGO facilities (34 percent), and private hospitals (10 percent).

Overall, about one-third of facilities had first-line treatment medications with availability limited to DHs, UHCs, and NGO facilities. The TB microscopy capacity was also very limited, and was available in less than one-fifth of facilities that offer TB services. In public facilities, TB microscopy was limited to DHs (41 percent) and UHCs (35 percent). Private hospitals (38 percent) were more likely than NGO facilities (21 percent) to have TB microscopy.

#### Table 9.3 Readiness of health facilities to provide TB services

Among facilities that offer any tuberculosis (TB) diagnostic, treatment and/or treatment follow-up services, the percentages that have the indicated items available in the facility on the day of the survey, by background characteristics, Bangladesh HFS 2014

Background characteristics	Any guideline for TB <sup>1</sup>	Trained staff at any time <sup>2</sup>	TB microscopy <sup>3</sup>	First-line TB medications⁴	Having all four items	Number of facilities offering any TB diagnostic, treatment and/or treatment follow- up services
Facility type						
District and upazila public facilities DH MCWC	<b>81.0</b> 65.5 0.0	<b>67.5</b> 69.0 33.3	<b>36.0</b> 41.4 0.0	<b>83.8</b> 60.3 33.3	<b>21.4</b> 25.9 0.0	<b>37</b> 5 0
UHC	83.9	67.5	35.4	87.7	20.9	32
Union level public facilities UHFWC UHFWC (upgraded) USC/RD	<b>55.4</b> 56.0 46.7 68.5	<b>11.1</b> 2.0 0.0 37.5	<b>0.0</b> 0.0 0.0 0.0	<b>52.7</b> 32.7 46.7 81.9	<b>0.0</b> 0.0 0.0 0.0	<b>19</b> 5 9 5
Public community clinic (CC)	27.0	46.6	0.0	6.8	0.0	53
NGO clinic/hospital	34.4	51.9	20.7	52.4	15.2	16
Private Hospital	10.4	33.9	38.4	1.7	0.0	22
Location						
Urban Rural	44.6 41.3	50.6 42.5	31.9 6.4	48.6 27.8	10.4 4.6	62 86
Division						
Barisal	31.1 31.9	17.1 31.4	11.1 11.2	19.6 33.8	4.3 3.7	13 31
Chittagong Dhaka	49.0	75.1	24.6	33.8 31.7	3.7 10.5	50
Khulna	32.9	33.6	16.7	23.7	3.7	20
Rajshahi	35.5	31.8	17.4	45.2	12.2	13
Rangpur Sylhet	84.1 35.9	21.6 60.5	12.8 8.0	88.2 40.8	5.4 5.7	13 8
Total	42.7	45.9	17.0	36.4	7.1	148
Total excluding CCs	51.5	45.5	26.6	53.1	11.0	95

Note: MCWC, union level facilities and CCs do not have the provision to provide TB Microscopy.

<sup>1</sup> National guidelines for the diagnosis and treatment of TB, guidelines for the management of HIV and TB co-infection, or any guideline related to MDR-TB treatment.

related to MDR-1B treatment. <sup>2</sup> At least one interviewed provider of any one of the following TB services reported receiving in-service training at any time relevant to the particular TB service: TB diagnosis and treatment; management of HIV and TB co-infection; MDR-TB treatment, identification of need for referral; DOTS treatment; or TB infection control. The training must have involved structured sessions, and does not include individual instruction that a provider might have received during routine supervision. <sup>3</sup> Functioning microscope, slides, and all stains for Ziehl-Neelson test (carbol-fuchsin, sulphuric acid and methylene blue) were available in the facility on the day of the survey visit. <sup>4</sup> Four-drug fix-dose combination (4FDC) available, or isoniazid, pyrazinamide, rifampicin, and ethambutol are all available, or a combination of these medicines to provide first line trootment.

of these medicines, to provide first-line treatment.

## Figure 9.2 Availability of items (tracer indicators) in health facilities for readiness to provide TB services



As Figure 9.3 shows, among facilities that offer TB services, only seven percent (11 percent excluding CCs) have all four service readiness items/indicators and, therefore, can be considered ready to provide TB services. The limited readiness overall is not surprising since MCWCs, union level facilities, and CCs do not have provision for TB microscopy, which is one of the four readiness indicators. However, the proportion considered as ready to provide quality TB services is low in other types of facilities. Only 26 percent of DHs, 21 percent of UHCs, and 15 percent of NGO facilities had all four of the items/indicators required to be assessed as ready to provide TB services. No private hospitals that offer TB services were found to be ready to provide those services. The proportion of facilities considered ready to provide TB services is low in both urban areas (10 percent) and rural areas (five percent) and in facilities across all of the divisions. Facilities in Rajshahi (12 percent) and Dhaka (11 percent) were the most likely to be assessed as ready to provide TB services.





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## SAMPLE DESIGN



			UH	FWCs				N	GOs		
Division	CCs	USCs	FWCs	UpFWCs	UHCs	MCWCs	DHs	Clinics	Hospitals	PHs	Total
Barisal	101	32	62	26	25	9	6	8	0	8	277
Chittagong	110	56	71	27	35	20	11	25	5	24	384
Dhaka	49	26	34	14	18	19	18	59	11	41	289
Khulna	38	20	27	11	14	14	10	17	0	9	160
Rajshahi	41	22	26	15	15	13	7	17	1	7	164
Rangpur	40	21	27	13	14	12	7	11	2	5	152
Sylhet	52	27	33	16	19	6	4	8	1	8	174
Bangladesh	431	204	280	122	140	93	63	145	20	102	1,600

#### Table A-2.2 Health facilities sample allocation, by division and health facility types in the oversampled districts, Bangladesh HFS 2014

				UHI	WCs				N	GOs		
Division	Districts	CCs	USCs	FWCs	UpFWCs	UHCs	MCWCs	DHs	Clinics	Hospitals	PHs	Total
	Bhola	25	6	14	4	6	2	1	2	0	1	61
Barisal	Jhalokathi	25	4	15	7	3	1	1	2	0	0	58
	Pirojpur	25	6	15	6	5	2	1	2	0	3	65
	Brahmanbaria	25	12	18	4	7	1	1	5	0	5	78
Chittagong	Laksmipur	25	10	12	6	4	2	1	5	0	5	70
	Noakhali	24	12	15	5	8	3	1	5	0	5	78
Sylhet	Habigong	24	11	14	8	7	1	1	4	0	2	72

 Table A-2.3 Expected survey precision at divisional level for an indicator at 30% level, Bangladesh HFS 2014

Division	Total	Relative standard error*
Barisal	277	9.2%
Chittagong	384	7.8%
Dhaka	289	9.0%
Khulna	160	12.1%
Rajshahi	164	11.9%
Rangpur	152	12.4%
Sylhet	174	11.6%
Bangladesh	1,600	3.8%

\*Conservative estimate because sampling fractions are not taken into account.

Table A-2.4 Expected survey precision at district level for an indicator at 30% level in the oversampled districts, Bangladesh HFS 2014

Division	Districts	Total	Relative standard error
	Bhola	61	19.6%
Barisal	Jhalokathi	58	20.1%
	Pirojpur	65	18.9%
	Brahmanbaria	78	17.3%
Chittagong	Laksmipur	70	18.3%
0 0	Noakhali	78	17.3%
Sylhet	Habigong	72	18.0%

\*Conservative estimate because sampling fractions are not taken into account.

Table A-2.5 Expected s level, Bangladesh HFS		v type level for an indicator at 30%
Facility type	Total	Relative standard error*
CCs	431	7.4%
USCs	204	10.7%
UHFWCs	402	7.6%
FWC	280	9.1%
Upg FWC	122	13.8%
UHCs	140	12.9%
MCWCs	93	NA**
DHs	63	NA**
NGOs	165	11.9%
Clinics	145	12.7%
Hospitals	20	NA**
PHS	102	15.1%
Bangladesh	1,600	3.8%

\*Conservative estimate because sampling fractions are not taken into account. \*\*Not applicable, since all facilities are sampled, standard errors estimation is not relevant.

#### Table A-2.6 Distribution of facilities in sample frame and final sample selection, by division

Number of facilities of each type in the sample frame, number of each type selected for the survey sample, and percentages of eligible facilities of each type that were included in the sample, by division, Bangladesh HFS 2014

							Div	ision								
	Ba	risal	Chitt	agong	Dh	naka	Kh	ulna	Raj	shahi	Ran	gpur	Sy	lhet	Т	otal
Background						Number										
characteristics	frame	selected	frame	selected	frame	selected	trame	selected	frame	selected	trame	selected	frame	selected	frame	selected
Facility type																
District and upazila public																
facilities	48	40	120	66	142	54	74	38	79	35	69	33	43	29	575	295
DH	6	6	11	11	18	17	10	10	7	7	7	7	4	4	63	62
MCWC	9	9	20	20	19	19	14	14	13	13	12	12	6	6	93	93
UHC	33	25	89	35	105	18	50	14	59	15	50	14	33	19	419	140
Union level public																
facilities	313	118	900	154	1291	73	613	58	584	63	617	61	275	76	4593	603
UHFWC	145	62	396	71	540	33	277	27	170	26	232	27	106	33	1866	279
UHFWC																
(upgraded)	105	26	248	27	377	14	188	11	221	15	198	13	84	16	1421	122
USC/RD	63	30	256	56	374	26	148	20	193	22	187	21	85	27	1306	202
Public community																
clinic (CC)	1001	101	2207	110	3329	49	1547	38	1905	41	1709	40	808	52	12506	431
NGO clinic/																
hospital	48	8	182	29	417	70	115	17	116	18	80	13	53	9	1011	164
Private hospital	13	8	114	25	258	41	40	9	30	7	13	5	31	8	499	103
Location																
Urban	85	45	305	91	674	139	204	58	172	46	113	39	85	27	1638	445
Rural	1338	230	3218	293	4763	148	2185	102	2542	118	2375	113	1125	147	17546	1,151
Division																
Barisal	1423	275	0	0	0	0	0	0	0	0	0	0	0	0	1423	275
Chittagong	0	0	3523	384	0	0	0	0	0	0	0	0	0	0	3523	384
Dhaka	0	0	0	0	5437	287	0	0	0	0	0	0	0	0	5437	287
Khulna	0	0	0	0	0	0	2389	160	0	0	0	0	0	0	2389	160
Rajshahi	0	0	0	0	0	0	0	0	2714	164	0	0	0	0	2714	164
Rangpur	0	0	0	0	0	0	0	0	0	0	2488	152	0	0	2488	152
Sylhet	0	0	0	0	0	0	0	0	0	0	0	0	1210	174	1210	174
Total	1423	275	3523	384	5437	287	2389	160	2714	164	2488	152	1210	174	19184	1,596
Total excluding CCs	422	174	1316	274	2108	238	842	122	809	123	779	112	402	122	6678	1,165

DH = District hospital, MCWC = Maternal and child welfare center, UHC = Upazila health complex, UHFWC = Union health and family welfare center, USC/RD = Union sub-center/rural dispensary, CC = Community clinic

## Table A-2.7 Distribution of facilities in sample frame and final sample selection, by managing authority

Number of facilities of each type in the sample frame, number of each type selected for the survey sample, and percentages of eligible facilities of each type that were included in the sample, by managing authority, Bangladesh HFS 2014

			Managing	g authority				
-	Pu	blic	N	GO	Pri	vate	To	otal
Background characteristics	Sample frame	Number selected						
Facility type								
District and upazila public								
facilities	575	295	0	0	0	0	575	295
DH	63	62	0	0	0	0	63	62
MCWC	93	93	0	0	0	0	93	93
UHC	419	140	0	0	0	0	419	140
Union level public facilities	4593	603	0	0	0	0	4593	603
UHFWC	1866	279	0	0	0	0	1866	279
UHFWC (upgraded)	1421	122	0	0	0	0	1421	122
USC/RD	1306	202	0	0	0	0	1306	202
Public community clinic (CC)	12506	431	0	0	0	0	12506	431
NGO clinic/hospital	0	0	1011	164	0	0	1011	164
Private hospital	0	0	0	0	499	103	499	103
Location								
Urban	396	218	760	124	482	103	1638	445
Rural	17278	1,111	251	40	17	0	17546	1,151
Division								
Barisal	1362	259	48	8	13	8	1323	275
Chittagong	3227	330	182	29	114	25	3523	384
Dhaka	4762	176	417	70	258	41	5437	287
Khulna	2234	134	115	17	40	9	2389	160
Rajshahi	2568	139	116	18	30	7	2714	164
Rangpur	2395	134	80	13	13	5	2488	152
Sylhet	1126	157	53	9	31	8	1210	174
Total	17674	1,329	1011	164	499	103	19184	1,596
Total excluding CCs	5168	898	1011	164	499	103	6678	1,165

Table A-2.8 Distribution of facilities by background characteristics and managing authority (weighted)

Number of facilities of each type by background characteristics according to managing authority, Bangladesh HFS 2014

	Ma	inaging autho	ority	_
Background characteristics	Public	NGO <sup>1</sup>	Private	Total
Facility type				
District and upazila				
public facilities	47	0	0	47
DH	5	0	0	5
MCWC UHC	8 35	0	0	8 35
UHC	35	0	0	35
Union level public				
facilities	374	0	0	374
UHFWC	149	0	0	149
UHFWC (upgraded)	117	0	0	117
USC/RD	108	0	0	108
Public community				
clinic (CC)	1,010	0	0	1,010
NGO clinic/hospital	0	81	0	81
Private hospital	0	0	36	36
Location				
Urban	34	61	36	130
Rural	1,397	21	0	1,418
Division				
Barisal	111	4	1	116
Chittagong	265	15	8	287
Dhaka	368	34	19	421
Khulna	185	10	3	197
Rajshahi	213	9	2	224
Rangpur	198	6	1	205
Sylhet	92	3	2	97
Total	1,431	81	36	1,548
Total excluding CCs	421	81	36	538

<sup>1</sup> NGO includes NGOs facilities operated by the local government.

providers of each type that were selected for the health worker	ed for the	Number or providers or each type that were present on the day or the survey (provider sample hame), number or each type selected for the health worker interview (prices and percentage or engine providers of each type that were selected for the health worker interview, by type of facility and provider qualification, Bangladesh HFS 2014	y or une su r interviev	interview, by type of facility and provider qualification, Bangladesh HFS 2014	of facility :	and provide	er qualific:	ation, Bang	ladesh HF	S 2014						
	District an upazila put facilities	District and upazila public facilities	Н	-	MCWC	٨C	5	UHC	Union lev facili	Union level public facilities	I HO	UHFWC	1HU 1PU	UHFWC (upgraded)	USC/RD	/RD
Qualifications of providers	Sample frame	Number Selected	Sample frame	Number selected	Sample frame	Number selected	Sample frame	Number selected	Sample frame	Number selected	Sample frame	Number selected	Sample frame	Number selected	Sample frame	Number selected
Provider type Specialist <sup>1</sup> General practitioner <sup>2</sup> Paramedics <sup>3</sup> Nurse/Midwife <sup>4</sup> Medical/pharmaceutical technician <sup>5</sup> Other health providers <sup>6</sup>	376 734 759 843 222 117	219 526 661 171 53	268.0 293.0 50.0 82.0 29.0	145.0 167.0 41.0 58.0 15.0	14.0 57.0 265.0 26.0 0.0 16.0	12.0 52.0 16.0 0.0 9.0	94.0 384.0 444.0 373.0 140.0 72.0	62.0 307.0 384.0 259.0 113.0 29.0	20 20 36 36	19 872 5 69	1.0 2.0 4.0 1.0 40.0	1.0 398.0 4.0 31.0	0.0 2.0 1.0 0.0 16.0	0.0 2.0 1.0 0.0 10.0	0.0 16.0 288.0 0.0 40.0	0.0 15.0 0.0 1.0 28.0
Total	3,051	2,102	1,166	623	378	325	1,507	1,154	1,009	968	453	437	211	202	345	329
- Qualifications of providers	clini Sample frame	clinic (CC) ple Number ne selected		inic/	   - 7	Private hospital Sample Numb frame select	Number selected	Sample frame	Total Number selected	I _	for provider type included in BHFS sample	0)	Total excluding CC Sample Numbe frame selecte	ding CC Number selected	for provider type included in BHFS sample	for provider type included in BHFS sample
Provider type Specialist <sup>1</sup> General practitioner <sup>2</sup> Paramedics <sup>3</sup> Nurse/midwife <sup>4</sup> Medical/pharmaceutical technician <sup>5</sup> Other health providers <sup>6</sup>	64 0 1 2 1 0 64 0 1 2 1 0 64 0 1 2 1 2 0 0	0 0 1 1 1 1 0 1 1 0 1 0 1 0 1 1 0 1 1 1 1 0 0 1	33 110 58 68 58 52	N		82 165 193 78 16	56 118 129 48 2	492 1,946 1,100 370 923	294 753 1,785 643 270 270	94 55 55 50 50 50 50 50 50 50 50 50 50 50	59.8 73.1 91.7 73.0 82.2	 4000. ωά	492 1,029 1,099 370 281	294 753 1,774 642 270 145	59.8 73.2 91.7 58.4 73.0 51.6	8; C; L; 4; O; O;
Total	656	626	601	446	16	544	362	5,861	4,504	4	76.8	5,2	5,205	3,878	74.5	.5
<sup>1</sup> Specialist (consultant) medicine [including cardiology], Specialist (consultant) general surgery, Specialist (consultant) obstetrics/gyne psychiatry, Specialist (consultant) anesthesia or any other specialist not listed above. <sup>2</sup> Medical Officer (MBBS) (any non-specialist doctor, including Assistant Surgeon, Emergency Medical Officer (EMO), Indoor Medical Officer (MCH/FP), Residential Medical Officer (RMO), regardless of designation or title) or Medical Officer - Anesthetist or Dental Surgeon. <sup>3</sup> SACMO/Medical Assistant, Family Welfare Visitor (FWV), or Paramedics. <sup>4</sup> Nurse/midwife, Matron, Nursing Supervisor, Sation Staff Nurse, Assistant Nurse/Staff Nurse or Midwife. <sup>6</sup> Family Matter (FWA) Health Assistant, Community Health Care Provider ICHCP) Health Inspectors. Assistant Health Inspectors.	luding car thesia or a ecialist do Officer (R elfare Visit rvisor, Ser th Assista	diology], Sp any other spe ctor, includir MO), regard or (FWV), or or Staff Nur chologist-Ef	ecialist (( ecialist no ng Assista less of de Paramec 'se, Assis 'se, Assis 'se, Assis	consultant) ti listed abc ant Surgeo signation ( tics. tant Nurse.	general ove. n, Emergi or title) or /Staff Nur.	surgery, S ency Medi Medical Of se or Midw	specialist ( ical Officer fficer - Απκ vife.	ialist (consultant) general surgery, Specialist (consultant) obstetrics/gynecology, Specialist (consultant) pediatrics, Specialist (consultant) alist not listed above. Assistant Surgeon, Emergency Medical Officer (EMO), Indoor Medical Officer (IMO), Maternal and Child Health/Family Planning Medical so of designation or title) or Medical Officer - Anesthetist or Dental Surgeon. Assistant Nurse/Staff Nurse or Midwife. Health Care Provider (CHCP), Health Inspectors, Assistant Health Inspectors, Nurritionist or Health Educator. Other Providers	) obstetric ndoor Med Dental Su	s/gynecold dical Office irgeon.	ogy, Speci er (IMO), † Nutritionis	ialist (cons Maternal ar	ultant) per nd Child F	diatrics, Sp Health/Fami Other Pro	becialist (co ily Planning viders.	onsultant g Medica

## PERSONS INVOLVED IN THE SURVEY

Members of the Technical Review Committee	
MS. Rownaq Jahan, Director General, NIPORT	Chairman
Project Director, RCHCIB	Member
Project Director, Urban Primary Health Care Service Delivery Project	Member
Deputy Secretary (Program), Ministry of Health & Family Welfare	Member
Deputy Chief (Health), Ministry of Health & Family Welfare	Member
Deputy Chief (Family Welfare), Ministry of Health & Family Welfare	Member
Director (PHC), Directorate General of Health Services	Member
Director (Hospital), Directorate General of Health Services	Member
Director (MCH Services), Directorate General of Family Planning	Member
Line Director (CCSDP), Directorate General of Family Planning	Member
Director, Census Wing, Bangladesh Bureau of Statistics (BBS)	Member
Dr. M. Kabir, Professor, Jahangir Nagar University	Member
Professor Nitai Chakraborti, Department of Statistics, Dhaka University	Member
Dr. Halida Hanum Akter, Chief of Party, NGO Health Service Delivery Program	Member
Dr. Ishtiaq Mannan, Chief of Party, MCHIP, Save the Children International	Member
Executive Director, Marie Stopes, Clinics Society	Member
Dr. Peter Kim Streatfield, Director, CPUCC, ICDDR,B	Member
Dr. Shams El Arifeen, Director, CACH, ICDDR,B	Member
Dr. Kanta Jamil, Senior M&E and Research Advisor, OPHNE USAID,	Member
Bangladesh	
Mr. Karar Zunaid Ahsan, M&E Advisor, PMMU, MOHFW	Member
Dr. Ahmed Al-Sabir, Consultant, ICF International, USA	Member
WHO Representative, Bangladesh	Member
Country Representative, UNFPA, Bangladesh	Member
Head of Health and Nutrition, UNICEF	Member
Task Team Leader (HPN), World Bank	Member
Country Director, Asian Development Bank, Dhaka	Member
Country Representative, SIDA, Dhaka	Member
Dr. M. Sekandar Hayat Khan, ACPR	Member
Ms. Shahin Sultana, Sr. Research Associate, NIPORT	Member
Mr. Subrata Kumar Bhadra, Sr. Research Associate, NIPORT	Member
Mr. Mohammed Ahsanul Alam, Evaluation Specialist, NIPORT	Member
Mr. Md. Rafiqul Islam Sarker, Director (Research), NIPORT	Member-Secretary

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Dr. Kanta Jamil, Senior M&E and Research Advisor, OPHNE USAID, Bangladesh	Member
Dr. Ishtiaq Mannan, Chief of Party, MCHIP, Save the Children International	Member
Mr. Karar Zunaid Ahsan, M&E Advisor, PMMU, MOHFW	Member
Dr. Ahmed Al-Sabir, Consultant, ICF International, USA	Member
Representative from data collecting firm	Member
Mr. Subrata Kumar Bhadra, Sr. Research Associate, NIPORT	Member
Mr. Mohammed Ahsanul Alam, Evaluation Specialist, NIPORT	Member
Ms. Shahin Sultana, Sr. Research Associate, NIPORT	Member-Secretary

#### **NIPORT Management Team**

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Prof. Dr. Sekander Hayat Khan, Team leaderMr. APM Shafiur Rahman, Co-team leaderDr. K. M. Rezaul Haque, Public health specialistMs. Ilmul Jahan Tani, IT specialistMr. Salamat Ullah, Survey specialistMr. Kh. Khairul Bashar, Data processing specialist

## **Training Team**

- Dr. Paul Ametepi Dr. Hamdy Moussa Mr. Rajendra Dangol Dr. Ahmed Al-Sabir Dr. Salma Binte Rahman Dr. Fatema-tuzJohraBristy Dr. DebobrataAichMajumder Dr. Zahidur Rahim
- Dr. Shirajul Islam Schoton
- Dr. Md. Afjalul Bashar
- Dr. Shamin Fatema Islam

### **Data Processing Team** Mr. Md. Didarul Islam

Mr. Md. Ilias Miah Mr. Md. Aminul Islam Mr. Lalon Ahmed Mr. Md. Nazmul Haque Mr. Md. Hossain ParvezShohag Mr. Md. Niamul Alam Siddiqui

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### Supervisors

Dr. Salma Binte Rahman Dr. Fatema-tuz Johra Bristy Dr. Debobrata Aich Majumder Dr. Zahidur Rahim Dr. Shirajul Islam Schoton Dr. Md. Afjalul Bashar Dr. Shamin Fatema Islam

#### Interviewers

Mr. Mokhlesur Rahman (Mijba) Mr. Md. Ziaur Rahman Mr. Sharif Ahmed Mr. Munshi Md. Sazedur Rahman Mr. Md. AlomgirHossen Ms. Sadia Jahan Munni Mr. Md. Mizanur Rahman Mr. Sourob Biswas Mr. Abu Nayem Mr. Abdul Barek Mr. Md. Anamul Haque Ms. Israt Jahan Jame Mr. Md. Rashedul Islam Rayhan Mr. Md. Mossaraf Hossain Mr. Md. Rana Parvez Mr. Md. Mizanur Rahman Ms. Lailv Mr. Md. Yeasin Arafat Khan Mr. Shamit Kumar Bhowmik Mr. Md. Rubel Ahmed Mr. Md. Rashedul Islam Mr. Nasim Hossain Ms. Mst. RomanaAkter Mr. Fahad Mahmud Mr. Jaynal Bepari Mr. Md. Kamrul Islam Mr. Atiqul Islam Mr. Md. Shahzalal Mr. Ruhul Amin Mr. Md. Labu Islam Mr. Dipayan Sarker Mr. Khalid Al Mijan Mr. Md. Anisur Rahman Mr. Md. Atiqur Rahman Mr. Md. Ziaul Haque Mr. Abu Zafor Mr. Md. Kamrul Hasan Mr. Md. Zakir Hossain Ms. Mousumi Akhter Mst. Nasrin Akhter Mr. Ilias Hossain

Mr. Robius Sani Ahmed Mr. Nikash Chandra Sarker Mr. Md. Rakibul Islam Mr. M. MAmeruzzaman Siddiq Mr. Najrul Islam Ms. Afroza Akhter Mr. Md. Al-Amin Kabir Mr. Md. Abdus Salam Mr. Md. Aminul Islam Mr. Md. Emran Hossain Mr. Md. Assaduzzaman Ms. Hira Akter Mr. Md. Sukur Mahmud Mr. Golam Rasul Mr. Syduzzaman Mr. Mahsin Ali Ms. Lipi Sarkar Mr. Md. Abdullah Al Razi Mr. Rakibul Islam Mr. Md. Mohidul Islam Mr. Md. Nurul Islam Mr. Md. Nazmul Hossain Ms. Sanzida Mahfuz Mr. Md. Tareq Aziz Sagor Mr. Shib Shongkar Mr. Md. Mahbub Alom Mr. Md. Merazul Islam Mr. Kabir Sarker Mr. Jahid Hossain Mr. Md. Ashraful Alam Mr. Md. Abdul Koddus Mr. Mehedi Hasan Mr. Kh. Mehedi Hasan Mr. Md. Zehad Hossain Mr. Jan Mohammad Mr. Md. Omar Faruk Mr. Md. Sazzad Hossain Mr. Md. Mahbubur Rahman Ms. Azmee Tonmoy Antor Mr. Razu Ahmed



# 2014 BANGLADESH HEALTH FACILITY SURVEY

# **INVENTORY QUESTIONNAIRE**

## FACILITY IDENTIFICATION

001	NAME OF FACI	ILITY					
001A	ADDRESS:						
001A	DIVISION						
002	DISTRICT (ZILA						
004	UPAZILA				······ Ц		
005	UNION/WARD				· · · · · · · · · · · · · · · · · · ·		
006	FACILITY NUME	BER					
007	DISTRICT HO UPAZILA HE MATERNAL / UNION HEAL UNION HEAL UNION SUBO COMMUNITY NGO CLINIC PRIVATE HO NGO HOSPI	EALTH COMPLEX (UHC) AND CHILD WELFARE C LTH AND FAMILY WELFA CENTER (UnSC) / RURA Y CLINIC OSPITAL MANAGING AUTHORITY)	CENTER (MCWC). ARE CENTER (UnHF) ARE CENTER (UnHF) AL DISPENSARY	WC) WC - UPDGRADEE	01         02         03         04         05         06         08         09         10         11		
	GOVERNME LOCAL GOV NGO (NAME PRIVATE-FC	/ERNMENT					
009	URBAN/RURAL URBAN . RURAL .	URBAN 1					
010	INPATIENT ONI YES . NO .				1 2		
	INTERVIEWER VISITS						
		1	2	3	FINAL VISIT		
DATE					DAY MONTH YEAR		
RESULT	TEWER NAME				INT. NUMBER		
RESULT 1 = FAC 2 = FAC 3 = POS 4 = FAC	T CODES CILITY COMPLET CILITY RESPOND STPONED / PART CILITY REFUSED CILITY CLOSED /	DENTS NOT AVAILABLE TIALLY COMPLETED					

## TOTAL NUMBER OF PROVIDER INTERVIEWS AND OBSERVATIONS

TOTAL NUMBER OF PROVIDERS INTERVIEWED.	
TOTAL NUMBER OF ANC OBSERVATIONS	
TOTAL NUMBER OF FAMILY PLANNING OBSERVATIONS TOTAL NUMBER OF SICK CHILD OBSERVATIONS *TOTAL NUMBER OF NORMAL DELIVERIES	



## FACILITY GEOGRAPHIC COORDINATES

SET	DEFAULT SETTINGS FOR GPS UNIT					
- -	SET COORDINATE SYSTEM TO LATITUDE / LONGITUDE SET COORDINATE FORMAT TO DECIMAL DEGREE SET DATUM TO WGS84					
STA	ND IN A LOCATION AT THE ENTRANCE OF T	HE FACILITY WITH PLAIN VIEW OF THE SKY				
1	TURN GPS MACHINE ON AND WAIT UNTIL	SATELITE PAGE CHANGES TO "POSITION"				
2	WAIT 5 MINUTES					
3	PRESS "MARK"					
4	HIGHLIGHT "WAYPOINT NUMBER" AND PRE	ESS "ENTER"				
5	ENTER X-DIGIT FACILITY CODE / FACILITY	NUMBER				
6	HIGHLIGHT "SAVE" AND PRESS "ENTER"					
7	PAGE TO MAIN MENU, HIGHLIGHT "WAYPO	INT LIST" AND PRESS "ENTER"				
8	HIGHLIGHT YOUR WAYPOINT					
9	9 COPY INFORMATION FROM WAYPOINT LIST PAGE					
10	10 WRITE ELEVATION [ALTITUDE]					
	BE SURE TO COPY THE WAYPOINT NAME FROM THE WAYPOINT LIST PAGE TO VERIFY THAT YOU ARE ENTERING THE CORRECT WAYPOINT INFORMATION ON THE DATA FORM					
010	WAYPOINT NAME (FACILITY NUMBER)					
011	ELEVATION	ELEVATION				
012	LATITUDE	N/S a				
		DEGREES/DECIM b c				
013	LONGITUDE	E/W a				
		DEGREES/DECIM b				
### CONSENT

FIND THE MANAGER, THE PERSON IN-CHARGE OF THE FACILITY, OR THE MOST SEN SERVICES WHO IS PRESENT AT THE FACILITY. READ THE FOLLOWING GREETING:	NIOR HEALTH WORKER RESPONSIBLE FOR CLIENT
Good day! My name is We are here on behalf of the National Insti Ministry of Health and Family Welfare (MOHFW) conducting a survey of health facilities to a about health services in BANGLADESH	
Now I will read a statement explaining the study.	
Your facility was selected to participate in this study. We will be asking you questions about v your facility during this study may be used by NIPORT, the MOHFW, organizations supporting improvement or for conducting further studies of health services.	
Neither your name nor the names of any other health workers who participate in this study wil is a small chance that any of these respondents may be identified later. Still, we are asking fo	• •
You may refuse to answer any question or choose to stop the interview at any time. However, services you provide and the nation.	, we hope you will answer the questions, which will benefit the
If there are questions for which someone else is the most appropriate person to provide the in person to help us collect that information.	formation, we would appreciate if you introduce us to that
At this point, do you have any questions about the study? Do I have your agreement to proce	ed?
INTERVIEWER'S SIGNATURE INDICATING CONSENT OBTAINED	DAY MONTH YEAR
100 May I begin the interview?	YES 1 NO
101 INTERVIEW START TIME	HOURS MINUTES

EXPLAIN TO THE RESPONDENT AT THE START OF THIS INTERVIEW THAT THERE ARE QUESTIONS ON MANAGEMENT MEETINGS AND QUALITY ASSURANCE ACTIVITIES THAT REQUIRE LOOKING AT RECORDS OF THOSE MEETINGS AND ACTIVITIES. IT WILL THEREFORE BE HELPFUL IF RECORDS PERTAINING TO MANAGEMENT MEETINGS AND QUALITY ASSURANCE ACTIVITIES ARE GATHERED, IF THEY ARE NOT READILY AVAILABLE AT THE LOCATION WHERE YOU ARE CONDUCTING THE INTERVIEW.

EXPLAIN ALSO THAT THERE IS A SUBSECTION ON HEALTH STATISTICS (NUMBER OF OUTPATIENT VISITS AND INPATIENT DISCHARGES) FOR THE IMMEDIATE PAST ONE COMPLETE MONTH. IT WILL BE HELPFUL TO ALSO START GATHERING SUCH INFORMATION IF INFORMATION IS NOT READILY AVAILABLE WHERE THE INTERVIEW IS BEING CONDUCTED.

THANK THE RESPONDENT AT THE END OF EACH SECTION OR SUBSECTION BEFORE PROCEDING TO THE NEXT DATA COLLECTION POINT

### MODULE 1: GENERAL INFORMATION AND SERVICE AVAILABILITY

#### SECTION 1: GENERAL SERVICE AVAILABILITY AND INPATIENT SERVICES

#### SERVICE AVAILABILITY

102	Does this facility offer any of the following client services? In other words, is there	YES	NO	DONE
	any location in this facility where clients can receive any of the following services:	TL3	NO	DONE
01	Child vaccination services, either at the facility or as outreach	1	2	
02	Growth monitoring services, either at the facility or as outreach	1	2	
03	Curative care services for children under age 5, either at the facility or as outreach	1	2	
04	Any family planning services including modern methods, fertility awareness methods (natural family planning), male or female surgical sterilization	1	2	
05	Antenatal care (ANC) services	1	2	
07	Normal delivery	1	2	
10	Diagnosis, treatment prescription or treatment follow-up for TB	1	2	
14	Diagnosis or management of non-communicable diseases, specifically diabetes cardiovascular diseases, and chronic respiratory conditions in adults.	1	2	
16	Cesarean delivery (Cesarean section)	1	2	
17	Laboratory diagnostic services, including any rapid diagnostic testing.	1	2	
18	Blood grouping and typing services	1	2	
19	Blood transfusion services	1	2	

### INPATIENT (INDOOR) SERVICES

110	Does this facility routinely provide in-patient care?	YES1 → 112 NO2
111	Does this facility have beds for overnight observation?	$\begin{array}{cccc} YES. & & 1 \\ NO. & & 2 \end{array} \rightarrow 200 \end{array}$
112	Excluding any delivery and/or maternity beds, how many <u>(overnight)</u> or <u>(in-patient)</u> beds in total does this facility have, both for adults and children?	# OF OVERNIGHT/ INPATIENT BEDS DON'T KNOW

#### SECTION 2: GENERAL FILTER QUESTIONS

#### **PROCESSING OF INSTRUMENTS**

200	I have a few questions about how surgical instruments, such as speculums, forceps, and other metal equipment are processed for re-use in this facility. Are instruments that are used in the facility processed (i.e., sterilized or high-level disinfected) for re-use?	YES 1 NO 2	→ 210
201	Is the final processing done in this facility, outside this facility, or both?	ONLY IN THIS FACILITY	

#### STORAGE OF MEDICINES

210	Does this facility store or keep any medicines (including antibiotics, analgesics), vaccines or contraceptive commodities in the facility? I am referring to medicines/commodities that are meant to be given or sold to clients when a provider prescribes them. PROBE	YES 1 FACILITIES STOCKS NO MEDICINES 2	→ 300
211	CHECK Q102.04 FAMILY PLANNING SERVICES AVAILABLE	NO FAMILY PLANNING SERVICES	→ 213
212	Are contraceptive commodities generally stored in the family planning service area, or are they stored in a common area with other medicines?	STORED IN FP SERVICE AREA	
213	CHECK Q102.10 TUBERCULOSIS SERVICES AVAILABLE	NO TUBERCULOSIS SERVICES	→ 300
214	Are medicines for the treatment of TB generally stored in the TB service area or are they stored in a common area with other medicines?	STORED IN TB SERVICE AREA	

### **MODULE 2: GENERAL SERVICE READINESS**

#### **SECTION 3**: 24-HOUR STAFF COVERAGE - INFRASTRUCTURE EXTERNAL SUPERVISION - USER FEES - SOURCES OF REVENUE

#### 24-HOUR STAFF COVERAGE

300*	Is there a health care worker present at the facility at all times, or officially on call for the facility at all times (24 hours a day) for emergencies? Specifically, I am referring to medical specialists, medical officers, nurses and paramedics.	YES, 24-HR STAFF 1 NO 24-HOUR STAFF 2	→ 310
301	Is there a duty schedule or call list for 24-hour staff coverage?	YES	→ 310
302	May I see the duty schedule or call list for 24-hour staff coverage?	SCHEDULE OBSERVED1 SCHEDULE REPORTED NOT SEEN2	

# COMMUNICATION

310	Does this facility have a <u>land line telephone</u> that is available to call outside at all times client services are offered?	YES1 NO2	→ 313
	CLARIFY THAT IF FACILITY OFFERS 24-HOUR EMERGENCY SERVICES, THEN THIS REFERS TO 24-HOUR AVAILABILITY.		
311	May I see the land line telephone?	OBSERVED 1 REPORTED NOT SEEN	
312	Is it functioning? ACCEPT REPORTED RESPONSE	YES1 NO2	
313	Does this facility have a <u>cellular telephone or a private</u> <u>cellular phone</u> that is supported by the facility?	YES1 NO2	→ 319
314	May I see either the facility-owned cellular phone or the private cellular phone that is supported by the facility?	OBSERVED 1 REPORTED NOT SEEN	
315	Is it functioning? ACCEPT REPORTED RESPONSE	YES1 NO2	
319	Does this facility have a computer?	YES1 NO2	→ 322
320	May I see the computer?	OBSERVED 1 REPORTED NOT SEEN	
321	Is it functioning? ACCEPT REPORTED RESPONSE	YES1 NO2	
322	Is there access to email or internet via computer and/or mobile phone within the facility? ACCEPT REPORTED RESPONSE.	YES1 NO2	→ 330
323	Is the email or internet routinely available for <u>at least 2 hours</u> on days that client services are offered? ACCEPT REPORTED RESPONSE.	YES1 NO2	

#### SOURCE OF WATER

330	What is the <i>most commonly used</i> source of water for the facility at this time? OBSERVE THAT WATER IS AVAILABLE FROM SOURCE OR IN THE FACILITY ON THE DAY OF THE VISIT. E.G., CHECK THAT THE PIPE IS FUNCTIONING.	PUBLIC TAP/STANDPIPE.       03         TUBEWELL/BOREHOLE       04         PROTECTED DUG WELL       05         UNPROTECTED DUG WELI       06         PROTECTED SPRING       07         UNPROTECTED SPRING       08         RAINWATER       09         BOTTLED WATER       10         CART W/SMALL TANK/DRUM       11         TANKER TRUCK       12         SURFACE WATER       13         OTHER (SPECIFY)       96         DON'T KNOW       98	32 32 32 40
331	Is water outlet from this source available onsite, within 500 meters of the facility, or beyond 500M of facility? REPORTED RESPONSE IS ACCEPTABLE	ONSITE	
332	Is there routinely a time of year when the facility has a severe shortage or lack of water?	YES 1 NO 2	

#### POWER SUPPLY

340	Is this facility connected to the national electricity grid?	YES 1 NO	342
341	During the past 7 days, was electricity (excluding any back-up generator) available during the times when the facility was open for services, or was it ever interrupted <i>for more than 2 hours at a time?</i>	ALWAYS AVAILABLE	
	CONSIDER ELECTRICITY TO BE ALWAYS AVAILABLE IF INTERUPTED FOR LESS THAN 2 HOURS AT A TIME.		
342	Does this facility have other sources of electricity, such as a generator or solar system?	YES1 NO OTHER SOURCE2 →	350
343	What other sources of electricity does this facility have? PROBE FOR ANSWERS AND CIRCLE ALL THAT APPLY	FUEL-OPERATED GENERATOR A BATTERY-OPERATED GENERATOR B SOLAR SYSTEM C	
344	CHECK Q343 GENERATOR USED (EITHER "A" OR "B" CIRCLED)	GENERATOR NOT USED (NEITHER "A" NOR "B" CIRCLED)	350
345	Is the generator functional?	YES1 NO2 DON'T KNOW8	346A
346	Is fuel (or a charged battery) available today for the generator? ACCEPT REPORTED RESPONSE FROM KNOWLEDGEABLE RESPONDENT.	YES	
346A	Does this facility have a program for routine preventive maintenance of the generator?	YES 1 NO ROUTINE MAINTENANCE 2 DON'T KNOW 8	346C
346B	Is the person responsible for routine preventive maintenance of the generator an onsite facility staff, or does this person come from outside the facility?	ONSITE SATFF.1OUSIDE SUPPORT.2BOTH ONSITE AND OUSIDE STAFF.3DON'T KNOW.8	
346C	Does this facility have a dedicated person responsible for operating the generator?	YES	

### EXTERNAL SUPERVISION

350	Does this facility receive any external supervision from the any upper level facility?	YES	→ 352C
351	When was the last time a supervisor from any upper level office came here on a supervisory visit? Was it within the past 6 months or more than 6 months ago?	WITHIN THE PAST 6 MONTHS	→ 352C
351A	During the past 6 months, how many supervisory visits has this facility received from an upper level office?	# OF SUPERVISORY VISITS	
352	The last time during the past 6 months that a supervisor from outside the facility visited, did he or she do any of the following:	YES NO	DON'T KNOW
01	Use a checklist to assess the quality of available health services data?	1 2	8
02	Discuss performance of the facility based on available health services data?	1 2	8
352A	Does this facility maintain records of written comments made by supervisors from outside the facility when they make their supervisory visits?	YES, RECORDS MAINTAINED 1 NO, RECORDS NOT MAINTAINED 2	→ 352C
352B	May I see records of written comments or suggestions made by a supervisor from outside the facility during a visit in the past 6 months?	OBSERVED	
352C	Now I would like to ask a few questions about community level supervision of community Health Workers. Does this facility have, or work with Community Health Workers (CHWs)?	YES	→ 360
352D	Do staff from this facility do community level supervision of the CHWs?	YES1 NO2	→ 360
352E	Is there an annual community level supervision schedule created by health facility staff?	YES1 NO2	→ 352G
352F	May I see the annual community level supervision schedule?	OBSERVED1 REPORTED NOT SEEN2	
352G	How many supervision visits to community level in the past six months were carried out by health facility staff?	# OF SUPERVISORY VISITS	

#### **USER FEES**

360*		YES 1	
	Does this facility have any <b>routine user-fees or charges</b> for client services, including charges for health cards and for client registration? These could be routine fees for some services or for medicines	NO2	→ 370
361	Does the facility charge a fixed fee that covers all services that a client receives, or are there separate fees for different components of the services provided by the facility? PROBE.	FIXED FEE COVERING ALL SERVICES 1 NO, CHARGE FEE FOR SEPARATE ITEMS 2	→ 363
362	Does this facility have a fee for the following items:		
	READ OUT EACH RESPONSE CATEGORY AND CIRCLE APPROPRIATELY	YES NO	
01	CLIENT HEALTH CARD	. 1 2	
02	REGISTRATION	1 2	
03	CONSULTATION	. 1 2	
04	MEDICINES	1 2	
05	VACCINES	1 2	
06	CONTRACEPTIVE COMMODITIES.	1 2	
07	NORMAL DELIVERIES	. 1 2	
08	SYRINGES AND NEEDLES	1 2	
09	CESAREAN SECTION	1 2	
13	LABORATORY TESTS	1 2	
363	Are the official fees posted or displayed so that the client can easily see them?	YES 1 NO POSTED FEES 2	→ 364A
364	May I see the posted fees?	OBSERVED, ALL FEES POSTED 1 OBSERVED, SOME BUT NOT ALL FEES. 2	
	REVIEW THE POSTED FEES AGAINST THE LIST OF ITEMS IN Q362 TO DETERMINE IF ALL FEES ARE POSTED		
364A	Does this facility ever exempt clients from user fees? In other words, are any of this facility's clients exempted from user fees?	YES	], 370
364B	Does this facility follow any written guidelines on exemption of user fees?	YES1 NO2	→ 370
364C	May I see the guidelines on exemption of user fees?	OBSERVED 1 REPORTED NOT SEEN 2	

#### SOURCES OF REVENUE

370	Now, I would like to ask about the sources of revenue or funding for this facility. Tell me if the facility received any revenue or funding from any of the listed resources during the <b>2012 - 2013</b> financial year. If <b>someone else</b> is more appropriate to provide financial information, please feel free to invite that person or refer me to that person.	MINISTRY OF HEALTH A OTHER PUBLIC MINISTRIES B MEDICAL SCHEMES (INSURANCE) C SOCIAL SECURITY FUND D REIMBURSEMENT BY EMPLOYER E GOVT. CONTRIBUTION TO PRIVATE F DONOR AGENCIES/NGOS G FAITH-BASED
	CIRCLE ALL THAT APPLY. PROBE FOR EACH.	COMMUNITY PROGRAMSI USER FEESJ OTHER (SPECIFY)X NONEY

#### **SECTION 4:** STAFFING - MANAGEMENT - CLIENT OPINION QUALITY ASSURANCE - TRANSPORT - HMIS AND HEALTH STATISTICS

### STAFFING

400	Please tell me: a) How many staff in each of the following qualification / oc	cupational categories are s	antioned (expected) to wor	k in this facility.
	b) For each qualification / occupational category, how many employed by, or seconded to facility) in total, either full time c) For each qualification / occupational category, among the	e or part time		-
		(a)	(b)	(c)
	QUALIFICATION / OCCUPATIONAL CATEGORY	SANCTIONED (EXPECTED)	ASSIGNED, EMPLOYED, OR SECONDED (POSTED)	PART TIME
01*	SUPERINTENDANT			
02*	DIRECTOR/MANAGER/COORDINATOR			
03*	UH&FPO			
04*	CONSULTANT(MEDICINE)			
05*	CONSULTANT(SUGERY)			
06*	CONSULTANT(OBS.&GYN.)			
07*	CONSULTANT (PEDIATRICS)			
08*	CONSULTANT(ORTHOPEDIC)			
09*	CONSULTANT (EYE)			
10*	CONSULTANT (ANESTHESIA)			
11*	CONSULTANT (RADIOLOGY AND IMAGING)			
12*	CONSULTANT (PATHOLOGIST)			
13*	CNSULTANT(ENT)			
14*	CONSULTANT(SKIN & VD)			
15*	CONSULTANT (CARDIOLOGY)			
16*	RESIDENTIAL MEDICAL OFFICER (RMO)			
17*	MEDICAL OFFICER (MO)/PHYSICIAN			
18*	RADIOLOGIST			
19*	PATHOLOGIST			
20*	ANESTHETIST			
21*	EMERGENCY MEDICAL OFFICER (EMO)			
22*	INDOOR MEDICAL OFFICER (IMO)			

23*	MEDICAL OFFICER (MO-BLOOD TRANSFUSION)		
24*	DENTAL SURGEON		
25*	MO (HOMEOPATH/UNANI/AYURVEDIC)		
26*	ASSIST REGISTRAR (MEDICINE)		
27*	ASSIST REGISTRAR (SURGERY)		
28*	ASSIST REGISTRAR (OBS/GYN)		
29*	ASSIST REGISTRAR (PEDIATRIC)		
30*	UPAZILA FAMILY PLANNING OFFICER (UFPO)		
31*	MEDICAL OFFICER (MO-CLINIC)		
32*	MEDICAL OFFICER (MCH-FP)		
33*	ASSIST FP OFFICER (AUFPO)		
34*	SENIOR FWV		
35*	SACMO		
36*	FAMILY PLANNING INSPECTOR (FPI)		
37*	FAMILY WELFARE VISITOR (FWV)		
38*	MATRON		
39*	NURSING SUPERVISOR		
40*	SENIOR STAFF NURSE		
41*	STAFF NURSE		
42*	ASSISTANT NURSE		
43*	MIDWIFE		
44*	PARAMEDIC		
45*	PHARMACIST		
46*	MEDICAL TECHNOLOGIST (LAB)		
47*	MEDICAL TECHNOLOGIST (BLOODTRANSFUSION)		
48*	MEDICAL TECHNOLOGIST (RADIOLOGY)		
49*	MEDICAL TECHNOLOGIST (PHYSIOTHERAPY)		
50*	MEDICAL TECHNOLOGIST (DENTAL)		
51*	EPI TECHNICIAN		
52*	TB LEPROSY CONTROL ADMINISTRATOR		
53*	NUTRITIONIST/DIETICIAN		
54*	HEALTH EDUCATOR		
55*	HEALTH INSPECTOR		
56*	SANITARY INSPECTOR		
57*	ASSISTANT HEALTH INSPECTOR		
58*	FEMALE MEDICAL ATTENDANT		

59*	WARD MASTER		
60*	ATTENDANT (OT/LAB/DISPENSARY/WARD BOY)		
61*	COMMUNITY HEALTH CARE PROVIDER		
62*	HEALTH ASSISTANT		
63*	FAMILY WELFARE ASSISTANT (FWA)		
64*	COUNSELOR		
65*	COMMUNITY MOBILIZER/SERVICE PROMOTER		
66*	OUT REACH WORHKER		
67*	STORE KEEPER		
68*	STATISTICIAN/STATISTICAL ASSISTANT	$\square$	
69*	OTHER-1		
70*	OTHER-2		
71*	TOTAL		

## CLIENT OPINION AND FEEDBACK

430	Does this facility have any system for determining clients' opinions about the health facility or its services?	YES1 NO2	→440
431	Please tell me all the methods that this facility uses to elicit client opinion CIRCLE ALL METHODS MENTIONED AND PROBE: ANY MORE?	SUGGESTION BOX.       A         CLIENT SURVEY FORM.       B         CLIENT INTERVIEW FORM.       C         OFFICIAL MEETIING       WITH COMMUNITY LEADERS.       D         INFORMAL DISCUSSION WITH       CLIENTS OR THE COMMUNITY.       E         EMAIL.       F       FACILITY'S WEBSITE.       G         LETTERS FROM CLIENTS/COMMUNITY.       H       TEXT/SMS MESSAGES.       I         OTHERX       DON'T KNOW.       Z	-+440

### QUALITY ASSURANCE

#### NOTIFY THE RESPONDENT THAT THIS SUBSECTION REQUIRES LOOKING AT RECORDS OF QUALITY ASSURANCE ACTIVITIES. IT WILL THEREFORE BE HELPFUL IF SUCH RECORDS ARE GATHERED BEFORE PROCEEDING WITH THE INTERVEIW.

440	Does this facility routinely carry out quality assurance activities? An example may be facility-wide review of mortality, or periodic audit of registers.	YES	]450
441	Is there an official record of any quality assurance activities carried out during the past year?	YES	→450
442	May I see a record of any quality assurance activity? A REPORT OR MINUTES OF A QA MEETING, A SUPERVISORY CHECKLIST, A MORTALITY REVIEW, AN AUDIT OF RECORDS OR REGISTERS ARE ALL ACCEPTABLE.	OBSERVED	

# TRANSPORT FOR EMERGENCIES

450	Does this facility have a <i>functional ambulance</i> or other vehicle for emergency transportation for clients that is stationed at this facility and that operates from this facility?	YES	→452
451	May I see the ambulance (or other vehicle)?	OBSERVED	] <sub>▶453</sub>
452	Does this facility have access to an ambulance or other vehicle for emergency transportation for clients that is stationed at another facility or that operates from another facility?	YES	] <sub>▶460</sub>
453	Is fuel available today? ACCEPT REPORTED RESPONSE FROM KNOWLEDGEABLE RESPONDENT.	YES	

#### HMIS

# FIND THE PERSON RESPONSIBLE FOR HEALTH INFORMATION SYSTEMS. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE ASSESSMENT BEFORE PROCEEDING WITH QUESTIONS IN THIS SUBSECTION

ASSESSMENT BEFORE PROCEEDING WITH QUESTIONS IN THIS SUBSECTION									
460	Does this facility have a system in place to regular health services data?	ly collec	t	YES1 NO2				→470	
461*	Please tell me:		(a)			(b)		()	$\sim$
-101	a) If this facility regularly compiles the following			HOW	FREQUEN		EPORTS	COP	/
	reports containing health services information		PILED?			PILED?		RECENT	
	<b>b</b> ) How frequently the reports are compiled, and			MONTHL			OFTEN		REPOR
	c) Finally, I would like to see a copy of the most re-	V/F 0		YOR	EVERY	EVERY	THAN		TED
		YES	NO	MORE	2-3	4 - 6	EVERY 6	OBSERV	NOT
				OFTEN	MONTHS	MONTHS	MONTHS	ED	SEEN
01	HOSPITAL ACTIVITY REPORT	1 <b>≯</b> b	2 7	1 <b>→</b> c	2 <b>→</b> c	3 <b></b> ▶c	4 <b>→</b> c	1	2
01		1.5	02	1	2 -0	0-+0	4 - 20		2
l F			-						
02	EPI REPORT	1 <b>≯</b> b	2	1 <b>→</b> c	2 <b>→</b> c	3 <b>→</b> c	4 <b>→</b> c	1	2
			034						
03	FAMILY PLANNIING REPORT	1 <b>≯</b> b	2 7	1 <b>→</b> c	2 <b>→</b> c	3 <b>→</b> c	4 <b>→</b> c	1	2
			04∢						
04	TB/LEPROSY REPORT	1 <b>≯</b> b	• –	4	0	0	4	1	2
04	IB/LEPROST REPORT	1 F D	2	1 <b>→</b> c	2 <b>→</b> c	3 <b>→</b> c	4 <b>→</b> c	I	2
			05						
05	LABORATORY REPORT	1 <b>≁</b> b	2 7	1 <b>→</b> c	2 <b>→</b> c	3 <b>→</b> c	4 <b>→</b> c	1	2
			06◀┛						
06	MORBIDITY / MORTALITY REPORT	1 <b>≯</b> b	2 7	1 <b>→</b> c	2 <b>→</b> c	3 <b>→</b> c	4 → c	1	2
00		I D	07	1	2-+0	3 <b></b> -	4	i.	2
			-						
07	MALARIA + KALA AZAR REPORT	1 <b>≯</b> b	2 7	1 <b>→</b> c	2 <b>→</b> c	3 <b>→</b> c	4 <b>→</b> c	1	2
			08◀┛						
08	NOTIFIABLE DISEASE REPORT	1 <b>≯</b> b	2 7	1 <b>→</b> c	2 <b>→</b> c	3 <b>→</b> c	4 <b>→</b> c	1	2
			09∢						
			•		<b>a</b> .	<u> </u>		4	0
09	IMCI REPORT	1 <b>≯</b> b	2	1 <b>→</b> c	2 <b>→</b> c	3 <b>→</b> c	4 <b>→</b> c	1	2
			10+						
10	EQUIPMENT STATUS REPORT.	1 <b>≁</b> b	2 7	1 <b>→</b> c	2 <b>→</b> c	3 <b>→</b> c	4 <b>→</b> c	1	2
			464◀┛						
464	Does this facility have a designated person, such a			VES				<u> </u>	
404	data manager, who is responsible for health service								→470
	data in this facility?			NO DEDICATED PERSON				770	
465	Who is responsible for health services data in this	facility?		DATA N	MANAGER	/HMIS PER	SON/STATIS	STICI/ 1	
		-		FACILI	TY IN-CHA	RGE		2	
	PROBE TO DETERMINE WHO THIS PERSON IS	;		OTHER SERVICE PROVIDER					

### HEALTH STATISTICS

NOTIFY THE RESPONDENT THAT THIS SUBSECTION REQUIRES THAT SOME STATISTICS ARE GATHERED, IF SUCH INFORMATION IS NOT READILY AVAILABLE AT THE LOCATION WHERE THE INTERVIEW IS BEING CONDUCTED.

470	CHECK Q110 INPATIENT CARE SERVICES AVAILABLE	NO INPATIENT CARE SERVICES ↓ 472
471	How many <u>live</u> discharges were made in the last completed calender month [MOHTH] for all conditions, both for adults and children? By this, I mean the number of patients who were admitted and then discharged alive.	# OF DISCHARGES
472	How many outpatient client visits were made to this facility in the last completed calendar month [MONTH] for both adults and children? IF MORE THAN 9,990 CLIENT VISITS, ENTER 9,990 AS MAXIMU	# OF CLIENT VISITS DON'T KNOW

#### SECTION 5: PROCESSING OF INSTRUMENTS FOR REUSE

KNOW	VLEDGEABLE ABOUT	HE MAIN LOCATION WHERE S	INSTRUMENTS IN THE	FACILI						
500	CHECK Q201: AR	RE ANY EQUIPMENT PROC	ESSED IN THE FACIL	.ITY?		NO (C	ODE 3 CIRCLEE	) []		
	L	(CODE	YES ES 1 or 2 CIRCLED)		GO T	TO NEXT SECTION O				
501		INDICATED ITEMS BELOW IS USE ou use [METHOD] in facility?" IF YES				_E, ASK TO SEE IT. ASK IF	TIT IS FUNCTIONIN	G OR NOT		
			-,			(A) USE AND AVAILABILI	TY	<u> </u>	(B) FU	INCTIONING
	ITEM				OBSERVED	REPORTED NOT SEEN	NOT USED	YES	NO	DON'T KNOW
01	ELECTRIC AUTOCLAV	/E (PRESSURE & WET HEAT)			1→ b	2→ b	3 2 ↓	1	2	8
02	NON-ELECTRIC AUTO	OCLAVE (PRESSURE & WET HEAT)		1 <b>→</b> b	2→ b	3 3◀	1	2	8	
03	ELECTRIC DRY HEAT	C DRY HEAT STERILIZER			1→ b	2→ b	3 4 <b>↓</b>	1	2	8
04	ELECTRIC BOILER OR	R STEAMER (NO PRESSURE)			1→ b	2→ b	3 _ 5 ◀	1	2	8
05	NON-ELECTRIC POT V	WITH COVER FOR BOILING/STEA	м		1	2	3			
06	HEAT SOURCE FOR N	NON-ELECTRIC EQUIPMENT (STO	VE OR COOKER)		1→ b	2→ b	3 7◀	1	2	8
07	AUTOMATIC TIMER (N	MAY BE ON EQUIPMENT)			1→ b	2→ b	3 8∢	1	2	8
08	TST INDICATOR STRIF	PS/OTHER ITEM THAT INDICATES	PROCESS IS COMPLETE		1	2	3			
09	ANY CHEMICALS FOR	CHEMICAL HLD			1	2	3			
502		ACH OF THE FOLLOWING METHOD NDICATE THE PROCESSING DETA					ACILITY, ASK YOUF	۲		
		(1) AUTOCLAVE (steam with pressure)	<b>(2)</b> DRY HEAT STERILIZAT	ION	BO	(3) ILING (HLD)	<b>(4)</b> STEAM HIGH LEV DISINFECTION (H			(5) HEMICAL HIGH LEVEL ISINFECTION (HLD)
A	Method	USED 1 NOT USED $2 \rightarrow 2$	USED 1 NOT USED 2 —	→ 3		$1 \\ \dots \\ 2 \longrightarrow 4$	USED NOT USED			SED 1 OT USED 2 →503
в c	Temperature (centigrade) Pressure	TEMPERATURE AUTOMATIC 666 DON'T KNOW 998 PRESS- URE	AUTOMATIC	666 998						
D	Units of pressure	AUTOMATIC 666 DON'T KNOW 998 → 1E UNITS OF PRESSURE: KG/SQ CM 1 ATM PRESSURE 2 KILOPASCAL (LB/IN <sup>2</sup> 3 MILLIMETER HG 4 DON'T KNOW8								
E	What is the duration in minutes when instrument is not wrapped in cloth for [METHOD]?	MINUTES           AUTOMATIC         666           NOT USED         995           DON'T KNOW         998	AUTOMATIC	666 998	MINUTES DON'T KNOV	W 998	MINUTES	998		INUTES
F	What is the duration in minutes when instrument is wrapped in cloth for autoclave?	MINUTES WRAPPED AUTOMATIC 666 NOT USED 995 DON'T KNOW 998								
G	Chemical disinfectant used								BE CH CII FC GL	LCOHOL
503		e any guidelines on final ation of surgical instruments?							$\square$	NEXT SECTION
504	May I see the guidelin	ines on processing or sterilization	n of equipment?			D				
	HAND-WRITTEN GUIDELINES POSTED ON WALLS IN AREA WHERE EQUIPMENT IS PROCESSED OR STERILIZED IS ACCEPTABLE				REPORTEL	D NOT SEEN		2		

#### SECTION 6: HEALTH CARE WASTE MANAGEMENT AND CLIENT LATRINE

FIND THE PERSON RESPONSIBLE FOR WASTE MANAGEMENT ACTIVITIES IN THE FACILITY. INTRODUCE YOURSELF AND EXPLAIN THE PURPOSE OF THE ASSESSMENT BEFORE PROCEEDING WITH THE QUESTIONS

600	Now I would like to ask you a few questions about waste management practices for sharps waste, such as needles or blades. How does this facility <i>finally</i> dispose of <i>sharps waste</i> (e.g., filled sharps boxes)? PROBE TO ARRIVE AT CORRECT RESPONSE <b>NOTE!</b> IF ANY OF THE RESPONSES 02 - 09 TAKE PLACE OUTSIDE THE FACILITY, THEN THE CORRECT RESPONSE TO CIRCLE WILL BE IN THE CATEGORY OF "REMOVE OFFSITE"	BURN IN INCINERATOR:         2-CHAMBER INDUSTRIAL (800-1000+°C)02         1-CHAMBER DRUM/BRICK03         OPEN BURNING         FLAT GROUND-NO PROTECTION04         PIT OR PROTECTED GROUND05         DUMP WITHOUT BURNING         FLAT GROUND-NO PROTECTION06         COVERED PIT OR PIT LATRINE07         OPEN PIT-NO PROTECTION08         PROTECTED GROUND OR PIT09         REMOVE OFFSITE         STORED IN COVERED CONTAINER10         STORED IN OTHER PROTECTED         ENVIRONMENT	
601	Now I would like to ask you a few questions about waste management practices for medical waste other than sharps, such as used bandages How does this facility <i>finally</i> dispose of <i>medical waste</i> other than sharps boxes? PROBE TO ARRIVE AT CORRECT RESPONSE <b>NOTE!</b> IF ANY OF THE RESPONSES 02 - 09 TAKE PLACE OUTSIDE THE FACILITY, THEN THE CORRECT RESPONSE TO CIRCLE WILL BE IN THE CATEGORY OF "REMOVE OFFSITE"	SAME AS FOR SHARP ITEMS.01BURN IN INCINERATOR:2-CHAMBER INDUSTRIAL (800-1000+°C).021-CHAMBER DRUM/BRICK.03OPEN BURNINGFLAT GROUND-NO PROTECTION.04PIT OR PROTECTED GROUND.05DUMP WITHOUT BURNINGFLAT GROUND-NO PROTECTION.06COVERED PIT OR PIT LATRINE.07OPEN PIT-NO PROTECTION.08PROTECTED GROUND OR PIT.09REMOVE OFFSITESTORED IN COVERED CONTAINER.10STORED IN OTHER PROTECTED11STORED UNPROTECTED.12OTHER96(SPECIFY)NEVER HAVE OTHER MEDICAL WASTE.95	
602	CHECK Q600 FACILITY-BASED WASTE DISPOSAL OR WASTE REMOVED OFFSITE (ANY CODE OTHER THAN "95" CIRCLED)	NEITHER FACILITY-BASED WASTE DISPOSAL NOR REMOVAL OFFSITE (CODE "95" CIRCLED)	→ 604
603	ASK TO SEE THE PLACE USED BY THIS FACILITY FOR DISPOSAL OF SHARPS WASTE AND INDICATE THE CONDITION OBSERVED. IF SHARPS WASTE IS DISPOSED OFF-SITE, OBSERVE THE SITE WHERE IT IS STORED PRIOR TO COLLECTION FOR OFF-SITE DISPOSAL. IF SITE NOT INSPTECTED, CIRCLE '8'.	NO WASTE VISIBLE	
604	CHECK Q601 FACILITY-BASED WASTE DISPOSAL OR WASTE REMOVED OFFSITE (ANY CODE "02" TO "96" CIRCLED)	NEITHER FACILITY-BASED WASTE DISPOSAL NOR REMOVAL OFFSITE (CODE "01" OR "95" CIRCLED)	→ 606
605	ASK TO SEE THE PLACE USED BY THIS FACILITY FOR DISPOSAL OF MEDICAL WASTE AND INDICATE THE CONDITION OBSERVED. IF MEDICAL WASTE IS DISPOSED OFF-SITE, OBSERVE THE SITE WHERE IT IS STORED PRIOR TO COLLECTION FOR OFF-SITE DISPOSAL. IF SITE NOT INSPTECTED, CIRCLE '8'.	NO WASTE VISIBLE	

606	CHECK Q600 AND Q601 INCINERATOR USED (EITHER "2" OR "3" CIRCLED)	INCINERATOR NOT USED (NEITHER "2" NOR "3" CIRCLED)	➡ 610
607	ASK TO BE SHOWN THE INCINERATOR	INCINERATOR OBSERVED.       1         INCINERATOR REPORTED NOT SEEN.       2	
608	Is the incinerator functional today?	YES 1 NO 2	7
	ACCEPT REPORTED RESPONSE FROM KNOWLEDGEABLE RESPONDENT.	DON'T KNOW	<b>_→</b> 610
609	Is fuel available today for the incinerator?	YES 1 NO	
	ACCEPT REPORTED RESPONSE	DON'T KNOW.	
610	Do you have any guidelines on health care waste management available in this service area? This may be part of the infection prevention guideline or protocol.	YES 1 NO GUIDELINE AVAILABLE	→620
611	May I see the guidelines on health care waste management?	OBSERVED	

# CLIENT LATRINE

620	Is there a toilet (latrine) in <i>functioning condition</i> that is available for general outpatient client use? IF YES, ASK TO SEE THE CLIENT TOILET AND INDICATE THE TYPE. THIS MUST BE TOILET FACILITIES FOR THE MAIN OUTPATIENT SERVICE AREA.	FLUSH OR POUR FLUSH TOILETFLUSH TO PIPED SEWER SYSTEM.11FLUSH TO SEPTIC TANK12FLUSH TO PIT LATRINE.13FLUSH TO SOMEWHERE ELSE.14FLUSH, DON'T KNOW WHERE.15PIT LATRINE15VENTILATED IMPROVED PIT LATRINE.21PIT LATRINE WITH SLAB.22PIT LATRINE WITHOUT SLAB / OPEN PIT.23COMPOSTING TOILET.31BUCKET TOILET.41HANGING TOILET / HANGING LATRINE.51NO FUNCTIONING FACILITY / BUSH / FIELD.61	→700
620A	Is there a separate sanitary toilet/latrine facility for the use of female clients?	YES, SEPARATE SANITARY/TOILET FACILITY FOR THE USE OF FEMALE CLIENTS 1 NO SEPARATE TOILETS, ONLY COMBINED TOILETS 2	

### SECTION 7: BASIC SUPPLIES - CLIENT EXAMINATION ROOM CLIENT WAITING AREA

AT THIS POINT TELL YOUR RESPONDENT THAT YOU WOULD LIKE TO SEE SOME BASIC SUPPLIES AND EQUIPMENT USED IN THE PROVISION OF CLIENT SERVICES. YOU WOULD LIKE TO SEE IF THESE SUPPLIES AND EQUIPMENT ARE AVAILABLE IN THE GENERAL OUTPATIENT AREA. IF YOU ARE NOT IN THE GENERAL OUTPATIENT AREA, ASK TO BE TAKEN TO THE GENERAL OUTPATIENT AREA.

### BASIC SUPPLIES AND EQUIPMENT

700	I would like to know if the following items are available		(A) AVAILABL		(B)	FUNCTIO	NING
	today in the main service area and are functioning		REPORTED	NOT	VEO	NO	DON'T
-	ASK TO SEE ITEMS.	OBSERVED		AVAILABLE	YES	NO	KNOW
01	ADULT WEIGHING SCALE	1 <b>→</b> b	2 → b	3	1	2	8
02	CHILD WEIGHING SCALE [250 GRAM GRADATION]	1 → b	2 → b	3	1	2	8
03	INFANT WEIGHING SCALE [100 GRAM GRADATION]	1 <b>→</b> b	2 → b	3	1	2	8
04	STADIOMETER (OR HEIGHT ROD) FOR MEASURING HEIGHT	1 → b	2 → b	3	1	2	8
05	MEASURING TAPE [FOR HEAD CIRCUMFERENCE]	1	2	3			
06	THERMOMETER	1 → b	2 → b	3	1	2	8
07	STETHOSCOPE	1→ b	2 → b	3	1	2	8
08	DIGITAL BP APPARATUS	1→ b	2 → b	3	1	2	8
09	MANUAL BP APPARATUS	1 → b	2 → b	3	1	2	8
10	LIGHT SOURCE (FLASHLIGHT ACCEPTABLE)	1 → b	2 → b	3	1	2	8
11	SELF-INFLATING BAG AND MASK [ADULT]	1 → b	2 → b	3	1	2	8
12	SELF-INFLATING BAG AND MASK [PEDIATRIC]	1 → b	2 → b	3	1	2	8
13	MICRONEBULIZER	1 -→ b	2 → b	3	1	2	8
14	SPACERS FOR INHALERS	1	2	3			
15	PEAK FLOW METERS	1 <b>→</b> b	2 → b	3	1	2	8
16	PULSE OXIMETER	1 → b	2 → b	3	1	2	8
17	OXYGEN CONCENTRATORS	1 → b	2 → b	3	1	2	8
18	FILLED OXYGEN CYLINDER	1 → b	2 → b	3	1	2	8
19	OXYGEN DISTRIBUTION SYSTEM	1 → b	2 → b	3	1	2	8
20	INTRAVENOUS INFUSION KITS - ADULT	1	2	3			
21	INTRAVENOUS INFUSION KITS - PEDIATRIC	1	2	3			

### CLIENT EXAMINATION ROOM

AT THIS POINT ASK TO BE SHOWN THE ROOM OR AREA IN THE GENERAL OUTPATIENT AREA WHERE MOST CLIENT SERVICES ARE OFFERED. OBSERVE THE CONDITION UNDER WHICH MOST CLIENT EXAMINATION TAKE PLACE. INDICATE IF THE FOLLOWING ITEMS ARE AVAILABLE IN THE ROOM OR AREA. ASK TO BE SHOWN ITEMS THAT YOU DO NOT SEE.

710	STANDARD PRECAUTIONS AND CONDITIONS FOR CLIENT EXAMINATION	OBSERVED	REPORTED, NOT SEEN	NOT AVAILABLE
01	RUNNING WATER (PIPED, BUCKET WITH TAP OR POUR PITCHER)	1	2	3
02	HAND-WASHING SOAP (MAY BE LIQUID SOAP)	1	2	3
03	ALCOHOL-BASED HAND RUB	1	2	3
04	WASTE RECEPTACLE (PEDAL BIN) WITH LID AND PLASTIC BIN LINER	1 _ 06∢	2	3
05	OTHER WASTE RECEPTACLE	1	2	3
06	SHARPS CONTAINER ("SAFETY BOX")	1	2	3
07	DISPOSABLE LATEX GLOVES	1	2	3
08	DISINFECTANT/ANTISEPTICS [E.G., CHLORINE, HIBITANE, ALCOHOL]	1	2	3
09	SINGLE-USE STANDARD DISPOSABLE SYRINGES WITH NEEDLES OR AUTO-DISABLE SYRINGES WITH NEEDLES	1	2	3
10	MEDICAL MASKS	1	2	3
11	GOWNS	1	2	3
12	EYE PROTECTION [GOGGLES OR FACE PROTECTION]	1	2	3
13	GUIDELINES FOR STANDARD PRECAUTIONS	1	2	3
711	DESCRIBE THE SETTING OF THE ROOM OR SERVICE AREA	OTHER ROOM AUDITORY VISUAL PRIVA	M I WITH AND VISUAL PRIV. CY ONLY	ACY2

#### CLIENT WAITING AREA

720	Is there a waiting area for clients where they are protected from the sun and rain?	YES1 NO PROTECTED CLIENT WAITING AREA2	
	ASK TO SEE THE CLIENT WAITING AREA. MUST BE THE WAITINGAREA IN THE MAIN OUTPATIENT SERVICE AREA.		

# **SECTION 8: DIAGNOSTICS**

CHECK Q102.17

800

DIAGNOSTIC SERVICES AVAILABLE IN FACILITY NO DIAGNOSTIC SERVICES

GO TO NEXT SECTION OR SERVICE SITE -

ASK TO BE SHOWN THE MAIN LABORATORY OR LOCATION IN THE FACILITY WHERE MOST TESTING IS DONE TO START DATA COLLECTION. INTRODUCE YOURSELF AND EXPLAIN THE PURPOSE OF THE SURVEY. FOR EACH OF THE TEST OF INTEREST, ASK AND GO TO THE MAIN LOCATION IN THE FACILITY WHERE THE INFORMATION WILL BE AVAILABLE. IF INFORMATION IS NOT IN THAT LOCATION ASK IF IT IS ANYWHERE ELSE IN THE FACILITY AND GO THERE TO COMPLETE THE QUESTIONNAIRE.

# HEMATOLOGY

801	Does this facility do any hemoglobin testing or in the facility?	ı site, i.	e.	-					→ 803
802	Please tell me if: a) Any of the following hemoglobin test equipment is used in this facility,	U	(a) SED	EQUIPMEN	(b) IT/ALL ITEMS AVAILABLE3			(c) HE ITEM I (ING ORD	
	<ul> <li>b) All items needed for the test are available, and</li> <li>c) Equipment is in working order</li> </ul>	Yes	No	OBSERVED	REPORTED, NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW
01	Hematology analyzer (for total lymphocyte count, full blood count, platelet count, etc.)	1 <b>*</b> b	2⊤ 02◀	1 ★ c	2 ► c	3 02∢	1	2	8
02	HemoCue	1 <b>►</b> b	2_ 04◀	1 → c	2* c	3 04◀	1	2	8
03	Microcuvette (with valid expiration date)			1	2	3			
04	Colorimeter or hemoglobinometer	1 <b>≯</b> b	2 07◀	1 <del>⊁</del> c	2 ► c	<sup>3</sup> 07◀	1	2	8
05	Drabkin's solution (for colorimeter and hemoglobinometer)			1	2	3			
06	Pipette (for measuring blood volume)	1 <b>*</b> b	2 07◀	1	2	3			
07	Litmus paper for hemoglobin test (with valid expiration date)	1 <b>►</b> b	2 803◀	1	2	3			
803	Does this facility do CD4 testing?								→ 830
804	Please tell me if:		(a)		(b)			(c)	
	a) Any of the following CD4 test equipment or assay is used in this facility,	U	SED	EQUIPMEN	IT/ALL ITEMS			ITEM IN V	
	<ul><li>b) Equipment or items needed for the test are available, and</li><li>c) Equipment is in working order</li></ul>	Yes	No	OBSERVED	REPORTED, NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW
01	Flow cytometer analyzer e.g., FACS count machine	1 <b>*</b> b	2⊤ 03≪	1 ► c	2 ► c	3 03∢	1	2	8
02	Reagent kits for flow cytometer analyzer			1	2	3			
03	Fluorescent cartridge / PIMA analyzer	1 <b>►</b> b	2⊤ 05 <b>⊄</b>	1 <b>*</b> c	2 ► c	3 05 <b>√</b>	1	2	8
04	Cartridges for fluorescent cartridge analyzer			1	2	3			
05	Rapid CD4 test strips	1 <b>*</b> b	2 830◀	1 <b>*</b> c	2 ► c	<sup>3</sup> 830 ↓			

# CLINICAL CHEMISTRY

830	Does this facility do any blood glucose testing in the facility?									→ 832
831	Please tell me if: a) Any of the following blood glucose test equipment is used in this facility		(a) JSED	EQUIPME		1	FOR TEST			) N WORKING NEXPIRED?
	<ul> <li>b) Equipment is available, and</li> <li>c) Equipment is in working order</li> </ul>	Yes	No	OBSERVE		PORTED, DT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW
01	Glucometer	1 <b>*</b> b	2 832⁴	1 <b>*</b> c	2	► C	3 832	1	2	8
02	Glucometer test strips			1 <b>→</b> c	2	► C	<sup>3</sup> ↓	1	2	8
832	Does this facility do any <i>liver function tests</i> ALT & AST) or <i>renal function tests</i> (such as serum creatinine) on site?	•	IS	_						→ 836
833	Does this facility have a blood chemistry analy that provides serum creatinine, LFTs and glue			-						→ 836
834	May I see the blood chemistry analyzer?									
835	Is the blood chemistry analyzer functioning?									
836	Does this facility do any <i>urine chemistry test</i> using dipsticks and/or <i>urine pregnancy test</i>	?							→ 838	
837	Please tell me if any of the following dipstick t used) in this location. If done or used, I will lik			(A) USE	)		(B) OBSE	RVED AV	AILABL	E NORMALLY
	IF DONE/USED ASK TO SEE IT AND NOTE	IF VAL	_ID/UNEXP		No		ST AVAILABL LIDNONE VAL		ORTED SEEN	AVAILABLE NOT TODAY
01	Dip sticks for urine protein				2- 2€	1	2	3		4
02	Dip sticks for urine glucose				2- 3 <b>-</b>	1	2	3		4
03	Urine pregnancy test				2 3 ◀	1	2	3		4
838	Do you ever send <u>blood or urine</u> outside the facility for blood chemistries, LFTs, urinalysis or pregnancy tests?			_						
839	INDICATE IF THERE IS AN OBSERVED REI OF RESULTS FOR TESTS CONDUCTED O			(A) SEND OUTSIDE			( )	RECOR		
01	Blood chemistries (e.g. glucose, sodium, pota	ssium	etc.)	YES 1► b	2		YES 1		2	
02	Liver Function Test (LFT)			1 <b>⊁</b> b			1		2	
03	Urinalysis			1⊁ b			1		2	
04	Pregnancy test			1 <b>⊁</b> b	2 840		1		2	

	FARASIN					001			
840	Please tell me if: a) Any of the following EQUIPMENT is used in the facility	EQUIF	(a) PMENT/ ST USED	EQUIPMEN	(b) NT/ALL ITEMS AVAILABLE?		(C) IS THE ITEM IN WORKING ORDER?		
	<ul> <li>b) Is available, and</li> <li>c) Equipment is functioning</li> </ul>	Yes	No	OBSERVED	REPORTED NOT SEEN	NORMALLY AVAILABLE NOT TODAY	YES	NO	DON'T KNOW
01	LIGHT MICROSCOPE	1 <b>≯</b> b	2 02 ◀	1 ★ c	2 ► c	3 02◀	1	2	8
02	ELECTRON MICROSCOPE	1 <b>≯</b> b	2 03◀	1 ★ c	2 ► c	3 03◀	1	2	8
03	REFRIGERATOR IN LAB AREA	1 <b>≁</b> b	2 04◀	1 <b>*</b> c	2 ► c	3 04◀	1	2	8
04	INCUBATOR	1 <b>⊁</b> b	2 05◀	1 ★ c	2 ► c	3 05◀	1	2	8
05	TEST TUBES	1 <b>→</b> b	2 06	1	2	3			
06	CENTRIFUGE FOR CSF MICROSCOPY	1 <b></b> "b	2 07◀	1 ★ c	2 <b>≯</b> c	3 7 ◀	1	2	8
07	CULTURE MEDIUM	1 <b>.</b> ► b	2 08◀	1	2	3			
08	GLASS SLIDES AND COVERS	1 <b>≁</b> b	2 848 ◀	1	2	3			

# PARASITOLOGY/BACTERIOLOGY

848	Does this facility do any GRAM STAINING?			-				→850
849	Please tell me if the following are		(a)		(b)			
	used and are available today.			EQUIPME	NT/ALL ITEMS			
		(	JSED		AVAILABLE?	NORMALLY		
	IF USED ASK TO SEE IT	Yes	No	OBSERVED	REPORTED, NOT SEEN	AVAILABLE NOT TODAY		
01	Crystal violet or Gentian violet	1 <b>≁</b> b	2 - 02∢	1	2	3		
02	Lugol's iodine / Lugol's solution	1 <b>≯</b> b	2 03◀	1	2	3		
03	Acetone or Acetone alcohol	1 <b>≯</b> b	2 04◀	1	2	3		
04	Neutral red, carbol fuchsin, or other counter stain	1 <b>≁</b> b	2 850◀	1	2	3		
850*	Do you ever send any specimen outside for <i>Gram staining</i> , <i>India Ink staining</i> or for culture?			-			1 2	→852
851	INDICATE IF THERE IS AN OBSERVED REG OF RESULTS FOR TESTS CONDUCTED O		E	(A) SEND SPECIMEN OUTSIDE FOR TEST			RECORD OF TEST	
				YES	NO	YES	NO	
01	Gram stain			1 <b>≯</b> b	2 02◀	1	2	
02	India ink stain			1 ► b	2 04◀	1	2	
04	Specimen for culture			1 ► b	2 _ 852 ◀	1	2	
852	Does this facility do STOOL MICROSCOPY?			-				▶ 854
853	Please tell me if the following are		(a)		(b)			
	used and are available today.		SED	EQUIPMEN	IT/ALL ITEMS			
						NORMALLY		
		Yes	No	OBSERVED	REPORTED, NOT SEEN	AVAILABLE NOT TODAY		
01	Formal saline (for concentration method)	1 <b>≯</b> b	2 02◀	1	2	3		
02	Normal saline (for direct microscopy)	1 <b>*</b> b	2 03◀	1	2	3		
03	Lugol's iodine / Lugol's solution	1 <b>*</b> b	2 _ 854 ◀	1	2	3		

# SYPHILIS

854	Does this facility do any <b>syphilis</b> testing on sit in the facility?	te, i.e.,		-					→ 859	
855	Do you use syphilis rapid diagnostic test to diagnose syphilis at this service site?			YES NO		→ 857				
856	kit?	May I see a sample syphilis rapid diagnostic test (RDT) kit? CHECK TO SEE IF AT LEAST ONE IS VALID Other than syphilis RDT, does this facility conduct				OBSERVED, AT LEAST 1 VALID. OBSERVED, NONE VALID. REPORTED AVAILABLE, NOT SEEN. NONE AVAILABLE TODAY.				
857	Other than syphilis RDT, does this facility con- any other syphilis testing in the facility?	duct			YES					
858	Please tell me if: <b>a)</b> Any of the following syphilis test or test equipment is used in this facility,		(a) TEST DUCTED	(b) ARE ALL ITEMS FOR TEST AVAILABLE?				(c) S THE ITE RKING OF	EM IN	
	<ul> <li>b) All items needed for the test are available, and</li> <li>c) Equipment is in working order</li> </ul>	Yes	No	OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW	
01	VDRL	1 <b>*</b> b	2⊤ 02◀	1	2	3				
02	PCR for STIs (CTN)	1 <b>*</b> b	2 03*	1	2	3				
03	Rotator or shaker			1 <b>*</b> c	2 ► c	3 04◀	1	2	3	
04	Rapid plasma reagin test (RPR)	1 <b>*</b> b	2⊤ 05◀	1	2	<sup>3</sup> 05◀				
05	Treponema Pallidum Hemaglutination Assay (TPHA)	1 <b>*</b> b	2⊤ 859 <del>4</del>	1	2	3 859◀				

# CHLAMYDIA

859	Does this facility do any <b>chlamydia</b> testing on in the facility?	Э.,		1 2	→ 861			
860	a) Any of the following chlamydia test, test equipment, or stain is used		(a) EST DUCTED		(b) LL ITEMS FOI AVAILABLE?	-		
	in the facility; <b>b)</b> All items needed for the test are available, and	Yes	No	OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE		
01	Geimsa stain	1 <b>*</b> b	2⊤ 02◀	1	2	3		
02	PCR for CHLAMYDIA	1 <b>*</b> b	2⊤ 861 <del>4</del>	1	2	3		

# TUBERCULOSIS

861	Does this facility do any <b>TB</b> tests on site?							1	→ 865
862	Please tell me IF: a) Any of the following TB tests or equipment is used in the facility	EQUIF	(a) PMENT/ USED	EQUIPME	(b) NT/ALL ITEMS AVAILABLE			(C ) S THE ITE RKING C	
	<ul> <li>b) All items needed for the test are available</li> <li>c) Equipment is functioning</li> </ul>	Yes	No	OBSERVED		NORMALLY AVAILABLE NOT TODAY	YES	NO	DON'T KNOW
01	Ziehl-Neelson test for AFB	1	2 05◀						
02	Carbol-Fuchsin	1 <b>*</b> b	2 03	1	2	3			
03	Sulphuric Acid (20 - 25% concentration) or Acid Alcohol	1 <b>*</b> b	2 04	1	2	3			
04	Methylene Blue	1 <b>*</b> b	2 05◀	1	2	3			
05	Fluorescence Microscope (FM) - LED	1 <b>*</b> b	2 06◀	1 <b>→</b> c	2→ c	3 06◀	1	2	8
06	Culture / growth medium for Mycobacterium Tuberculosis (e.g., MGIT 960)	1 <b>*</b> b	2 - 07 ◀	1	2	3			
07	Biosafety hood / cabinet	1 <b>*</b> b	2_ 08◀	1	2	3			
08	Auramine stain for Fluorescence Microscope	1 <b>≯</b> b	2- 863◀	1	2	3			
863	Do you use TB rapid diagnostic test (such as diagnose TB at this laboratory / service site?	GeneE	kpert) to						
864	May I see a sample TB rapid diagnostic test (F CHECK TO SEE IF AT LEAST ONE IS VALIE	,	t?	OBSERV REPORT	ED, AT LEAST ED, NONE VAI ED AVAILABLI /AILABLE TOD	LID		2 3	
865	Do you maintain any sputum containers at this site for collecting sputum specimen?	servic	е						
866	May I see a sample sputum container?			REPORT	ED	۱		3	
867	Does this laboratory send sputum outside the facility for TB testing?			NO	NOW			2	
868	Do you maintain records of result of sputum tests conducted elsewhere?								
869	May I see the record or register?				ED ED, NOT SEEI				
870	Is there a system for quality control (either inte or external) for the TB sputum smears assess in this laboratory?			_					
871	Please tell me which type of Quality Control / Assurance practice is followed by this facility	Quality		EXTERN	IL QC / QA ON AL QC / QA ON IL & EXTERNA	ILY		2	
	PROBE TO DETERMINE WHICH TYPE OF C CONTROL IS USED	QUALT	Y		IDE FOR RE-F SPECIFY)			4 _ 6	
872	Are records maintained of the results from the control (internal or external) procedures?	quality	Ţ						
873	Are records maintained for the internal QC / Q the external QC / QA procedures, or for both in external QC / QA procedures?			RECORD RECORD	S FOR IQC / I S FOR EQC / S FOR BOTH XTERNAL QC	EQA ONLY INTERNAL		2	

## **DIAGNOSTIC IMAGING**

880	Does this facility perform diagnostic X-rays, ultrasound, or computerized tomography?			YES1 NO2							
	IF YES, ASK TO GO TO WHERE THE EQUI IS LOCATED AND SPEAK WITH THE MOST KNOWLEDGEABLE PERSON.		-	SKIP TO NEXT SECTION							
881	Please tell me if: a) If any of the following imaging equipment		(a) JIPMENT		(b)		1	(c ) S THE IT	EM IN		
	is used in the facility		JSED		AVAILABLE		-		DRDER?		
	<ul><li>b) if it is available today, and</li><li>c) if it is functioning today</li></ul>	Yes	No	OBSERVED	REPORTED NOT SEEN	NORMALLY AVAILABLE NOT TODAY	YES	NO	DON'T KNOW		
01	DIGITAL X-RAY MACHINE NOT REQUIRING FILM	1 <b>≁</b> b	2 02◀	1→c	2 <b>→</b> c	3 02◀	1	2	8		
02	X-RAY MACHINE	1 <b>≁</b> b	2 04 <b>↓</b>	1 <b>→</b> c	2 <b>→</b> c	3 _ 03◀	1	2	8		
03	UNEXPIRED FILM FOR X-RAY			1	2	3 04◀					
04	ULTRASOUND SYSTEM / MACHINE	1 <b>≁</b> b	2 05∢	1 <b>→</b> c	2 <b>→</b> c	3 05◀	1	2	8		
05	CT SCAN		2 NEXT TION	1 → c SKIP 1	2 → c TO NEXT SEC	<sup>3</sup> TION◀	1 ALL SK	2 IP TO NEXT			
	THANK YOUR RESPONDENT FOR THE TIN DATA COLLECTION SITE	IE AND	HELP PR	OVIDED AND	PROCEED T	O THE NEXT					

#### **SECTION 9: MEDICINES AND COMMODITIES**

900 CHECK Q210

FACILITY STORES MEDICINES FACILITY STORES NO MEDICINES

GO TO NEXT SECTION +

### SECTION 9.1: GENERAL MEDICINES AND SUPPLY ITEMS

ASK TO BE SHOWN THE MAIN LOCATION IN THE FACILITY WHERE MEDICINES AND OTHER SUPPLIES ARE STORED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT STORAGE AND MANAGEMENT OF MEDICINES AND SUPPLIES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS

I would like to know if the following medicines are available today in this facility. If any of the medicines I mention is stored in another location in the facility, please tell me where in the facility it is stored so I can go there to verify.

### ANTIBIOTICS

901	Are any of the following <b>antibiotics</b> available in this facility/location today?	(A) OBS AVAIL		(B)	NOT OBSER\	/ED
	CHECK TO SEE IF AT LEAST ONE IS VALID (NOT EXPIRED)	AT LEAST ONE VALID	AVAILABLE NONE VALID	REPORTED AVAILABLE NOT SEEN	NOT AVAILABLE TODAY/DK	NEVER AVAILABLE
01	AMOXICILLIN TABLET/CAPSULE (Bacterial infections in adults)	1	2	3	4	5
02	AMOXICILLIN SYRUP/SUSPENSION OR DISPERSIBLE PEDIATRIC- DOSED TABLETS (Oral antibiotics for children)	1	2	3	4	5
03	AMOXICILIN/CLAVULINATE (AUGMENTIN) TABS (broad spectrum antibio	otics) 1	2	3	4	5
04	AMPICILLIN (POWDER) INJECTION (Broad spectrum antibiotic)	1	2	3	4	5
05	AZITHROMYCIN TABS/CAPS (antibiotic)	1	2	3	4	5
06	AZITHROMYCIN SYR/SUSPENSION (antibiotic)	1	2	3	4	5
07	BENZATHINE BENZYLPENICILLIN (POWDER) FOR INJECTION	1	2	3	4	5
08	CEFIXIME TABS/CAPS (antibiotic)	1	2	3	4	5
09	CEFTRIAXONE INJECTION (Injectable antibiotic)	1	2	3	4	5
10	CIPROFLOXACIN (2nd-line oral antibiotic)	1	2	3	4	5
11	CO-TRIMOXAZOLE (TABS) (Oral antibiotics-adult formation)	1	2	3	4	5
12	CO-TRIMOXAZOLE SUSPENSION OR DISPERSIBLE PEDIATRIC- DOSED TABLET (Oral antibiotics for children)	1	2	3	4	5
13	DOXYCYCLINE TABS/CAPS [Broad spectrum antibiotic]	1	2	3	4	5
14	ERYTHROMYCIN [Broad spectrum antibiotic, oral tabs]	1	2	3	4	5
15	ERYTHROMYCIN [oral suspension]	1	2	3	4	5
16	GENTAMYCIN INJECTION (Broad spectrum injectable antibiotic)	1	2	3	4	5
17	METRONIDAZOLE TABLETS [antibiotic/amebecide/antiprotozoal]	1	2	3	4	5
18	METRONIDAZOLE INJECTION	1	2	3	4	5
19	PENICILLIN INJECTION (Broad spectrum injectable antibiotic)	1	2	3	4	5
20	TETRACYCLINE [Broad spectrum antibiotic, oral caps]	1	2	3	4	5
21	TETRACYCLINE EYE OINTMENT	1	2	3	4	5
23*	CHLORAMPHENICOL EYE DROP 0.5%	1	2	3	4	5
24*	CHLORAMPHENICOL EYE OINTMENT1%	1	2	3	4	5
25*	CIPROFLOXACIN EYE DROP 0.3%	1	2	3	4	5
26*	AMPICILLIN CAPSULE (Broad spectrum antibiotic)	1	2	3	4	5

		(A) OBSERVED AVAILABLE				DBSERVED	
		AT LEAST ONE VALID	AVAILABLE NONE VALID	REPORTED AVAILABLE NOT SEEN	NOT AVAILABLE TODAY/DK	NEVER AVAILABLE	
27*	CEFALEXIN CAPSULE	1	2	3	4	5	
28*	CEFALEXIN DRY SYRUP	1	2	3	4	5	
29*	CEFRADINE CAPSULE	1	2	3	4	5	
30*	CEFRADINE DRY SYRUP	1	2	3	4	5	
31*	CIPROFLOXACIN DRY SYRUP	1	2	3	4	5	
32*	CLOXACILLIN CAPSULE	1	2	3	4	5	
33*	CLOXACILLIN DRY SYRUP	1	2	3	4	5	
34*	FLUCLOXACILLIN CAPSULES	1	2	3	4	5	
35*	FLUCLOXACILLIN DRY SYRUP	1	2	3	4	5	
36*	PENICILLIN-V TABLETS	1	2	3	4	5	
37*	PENICILLIN-V DRY SYRUP	1	2	3	4	5	
38*	LEVOFLOXACIN TABLETS	1	2	3	4	5	

# MEDICINES FOR WORM INFESTATION

902	Are any of the following medicines for the treatment of worm infestations available in the facility/location today?	(A) OBSERVED AVAILABLE		(B) NOT OBSERVED		/ED
	CHECK TO SEE IF AT LEAST ONE IS VALID (NOT EXPIRED)	AT LEAST ONE VALID	AVAILABLE NONE VALID	REPORTED AVAILABLE NOT SEEN	NOT AVAILABLE TODAY/DK	NEVER AVAILABLE
01	ALBENDAZOLE CHEWABLE TABLETS (200mg OR 400mg)	1	2	3	4	5
02	MEBENDAZOLE CHEWABLE TABLETS (100mg OR 500mg)	1	2	3	4	5
03*	MEBENDAZOLE SUSPENSION (100mg/5ml)	1	2	3	4	5
04*	LEVAMISOLE TABLET (40mg)	1	2	3	4	5
05*	LEVAMISOLE SYRUP (40mg/5ml) 100ML/250ML/450ML	1	2	3	4	5

903	Are any of the following medicines for the management of non-communicable diseases available in the facility/location today?	(A) OBS AVAIL		(B) NOT OBSERVED		
	CHECK TO SEE IF AT LEAST ONE IS VALID (NOT EXPIRED)	AT LEAST ONE VALID	AVAILABLE NONE VALID	REPORTED AVAILABLE NOT SEEN	NOT AVAILABLE TODAY/DK	NEVER AVAILABLE
01	AMITRIPTYLINE (Depression)	1	2	3	4	5
02	AMLODIPINE TABLETS (CCB for high blood pressure)	1	2	3	4	5
03	ATENOLOL (Beta-blocker, Angina/hypertension)	1	2	3	4	5
04	BECLOMETHASONE INHALER	1	2	3	4	5
05	BETAMETHASONE INJECTION	1	2	3	4	5
06	CAPTOPRIL (Vaso-dilatation, cardiac hypertension)	1	2	3	4	5
07	DEXAMETHASONE INJECTION (ORADEXON)	1	2	3	4	5
08	DIAZEPAM INJECTION (Anxiety/muscle relaxant/anticonvulsant)	1	2	3	4	5
09	ENALAPRIL CAPSULE/TABLET (A.C.E INHIBITOR)	1	2	3	4	5
10	OTHER A.C.E INHIBITOR	1	2	3	4	5
11	EPINEPHRINE INJECTION	1	2	3	4	5
12	FUROSEMIDE (LASIX) (DIURETIC)	1	2	3	4	5
13	THIAZIDE DIURETIC	1	2	3	4	5
14	GLIBENCLAMIDE (Oral treatment for type-2 diabetes)	1	2	3	4	5
15	GLUCOSE INJECTABLE SOLUTION	1	2	3	4	5
16	HEPARIN INJECTION	1	2	3	4	5
17	HYDROCORTISONE	1	2	3	4	5
18	INSULIN INJECTIONS [DIABETES]	1	2	3	4	5
19	ISOSORBIDE DINITRATE	1	2	3	4	5
20	METFORMIN TABLETS	1	2	3	4	5
21	NIFEDIPINE TABLETS/CAPSULES (CCB for high blood pressure)	1	2	3	4	5
22	OMEPRAZOLE (Gastro-esophageal reflux)	1	2	3	4	5
23	PREDNISOLONE	1	2	3	4	5
24	SALBUTAMOL INHALER (Bronchospasms/Chronic asthma)	1	2	3	4	5
25	SIMVASTATIN (High cholesterol)	1	2	3	4	5
26	ASPIRIN TABLETS	1	2	3	4	5
27*	SALBUTAMOL TABLET 2mg or 4 mg (Bronchospasms/Chronic asthma)	1	2	3	4	5
28*	SALBUTAMOL SYRUP (2mg or 4 mg) (Bronchospasms/Chronic asthma)	1	2	3	4	5
29*	AMINOPHYLLINE TABLET (100mg)	1	2	3	4	5
30*	ANTACID CHEWABLE TABLET (ALUM. HYDROXIDE + MAG. HYDROXIDE	E) 1	2	3	4	5
31*	DIAZEPAM 5MG TABLETS	1	2	3	4	5

# ANTI-FUNGAL MEDICINES

904	Are any of the following <b>anti-fungal medicines</b> available in the facility/location today?	(A) OBSERVED AVAILABLE				
	CHECK TO SEE IF AT LEAST ONE IS VALID (NOT EXPIRED)	AT LEAST ONE VALID	AVAILABLE NONE VALID	REPORTED AVAILABLE NOT SEEN	NOT AVAILABLE TODAY/DK	NEVER AVAILABLE
01	FLUCONAZOLE					
02	MICONAZOLE VAGINAL PESSARIES	1	2	3	4	5
03	MICONAZOLE CREAM	1	2	3	4	5
04	NYSTATIN ORAL SUSPENSION	1	2	3	4	5
05	NYSTATIN VAGINAL PESSARIES/CREAM	1	2	3	4	5
06*	GRISEOFULVIN TABLET (500mg)	1	2	3	4	5
07*	GENTIAN VIOLET 2% TOPICAL SOLUTION	1	2	3	4	5
08*	NEOMYCIN & BACITRACIN SKIN OINTMENT 10mg	1	2	3	4	5

MATERNAL AND CHILD HEALTH							
906	Are any of the following medicines for <b>maternal health</b> available in the facility/location today?	· · /	(A) OBSERVED AVAILABLE		NOT OBSER	/ED	
	CHECK TO SEE IF AT LEAST ONE IS VALID (NOT EXPIRED)	AT LEAST ONE VALID	AVAILABLE NONE VALID	REPORTED AVAILABLE NOT SEEN	NOT AVAILABLE TODAY/DK	NEVER AVAILABLE	
01	CALCIUM GLUCONATE INJECTION	1	2	3	4	5	
02	FOLIC ACID TABLETS	1	2	3	4	5	
03	IRON TABLETS	1	2	3	4	5	
04	IRON + FOLIC ACID COMBINATION TABLET	1	2	3	4	5	
05	MAGNESIUM SULPHATE INJECTION	1	2	3	4	5	
06	MISOPROSTOL TABLETS/CAPSULES	1	2	3	4	5	
07	OXYTOCIN OR OTHER INJECTABLE UTEROTONIC	1	2	3	4	5	
08	TETANUS TOXOID VACCINE	1	2	3	4	5	
09	ORAL REHYDRATION SALTS (ORS) SACHETS	1	2	3	4	5	
10	VITAMIIN A CAPSULES	1	2	3	4	5	
11*	ZINC DISPERSIBLE TABLETS	1	2	3	4	5	
12*	CALCIUM LACTATE TABLET	1	2	3	4	5	
13*	FERROUS SULPHATE + FOLIC ACID + ZINC CAPSULES	1	2	3	4	5	
14*	FERROUS FUMERATE + FOLIC ACID TABLET	1	2	3	4	5	
15*	ZINC SULPHATE SYRUP	1	2	3	4	5	
16*	METHYL ERGOMETRINE INJECTION	1	2	3	4	5	
17*	ERGOMETRINE TABLET	1	2	3	4	5	
18*	GENTIAN VIOLET 1%	1	2	3	4	5	
19*	NYSTATIN DROPS	1	2	3	4	5	

907	Are any of the following <b>intravenous fluids</b> available in the facility/location today?	(A) OBSERVED AVAILABLE				/ED
	CHECK TO SEE IF AT LEAST ONE IS VALID (NOT EXPIRED)	AT LEAST ONE VALID	AVAILABLE NONE VALID	REPORTED AVAILABLE NOT SEEN	NOT AVAILABLE TODAY/DK	NEVER AVAILABLE
01	NORMAL SALINE / SODIUM CHLORIDE INJECTABLE SOLUTION	1	2	3	4	5
02	RINGERS LACTATE (HARTSOL)	1	2	3	4	5
03	5% DEXTROSE - NORMAL SALINE	1	2	3	4	5

# FEVER REDUCING AND PAIN MEDICINES

908	Are any of the following <b>OTHER medicines</b> available in the facility/location today?	(A) OBSERVED AVAILABLE		(B) NOT OBSERVED		
	CHECK TO SEE IF AT LEAST ONE IS VALID (NOT EXPIRED)	AT LEAST ONE VALID	AVAILABLE NONE VALID	REPORTED AVAILABLE NOT SEEN	NOT AVAILABLE TODAY/DK	NEVER AVAILABLE
01	DICLOFENAC TABLETS (50 mg) OR SUSTAINED RELEASE TABS (100m	ig) 1	2	3	4	5
02	PARACETAMOL TABLETS	1	2	3	4	5
03*	PARACETAMOL SYRUP OR SUSPENSION	1	2	3	4	5
04*	PARACETAMOL DISPERSIBLE PEDIATRIC-DOZED TABLETS	1	2	3	4	5
05*	INDOMETHACIN CAPSULES	1	2	3	4	5
06*	DROTAVERINE TABLET	1	2	3	4	5
07*	DICLOFENAC INJECTION	1	2	3	4	5
08*	PETHIDINE INJECTION (100mg/2ml OR 25mg/1ml)					
09*	IBUPROFEN TABLETS					

# STORAGE CONDITION: ANTIBIOTICS & GENERAL MEDICINES

909	OBSERVE THE PLACE WHERE THE MEDICINES ASSESSED SO FAR ARE STORED AND INDICATE THE PRESENCE (OR ABSENCE) OF EACH OF THE FOLLOWING STORAGE CONDITIONS.			NO		
01	ARE THE MEDICINES OFF THE FLOOR?		1	2		
02	ARE THE MEDICINES PROTECTED FROM WATER		1	2		
03	ARE THE MEDICINES PROTECTED FROM THE SUN?		1	2		
04	IS THE ROOM CLEAN OF EVIDENCE OF RODENTS (BATS, RATS) OR PESTS (ROACHES, ETC)?			2		
05	IS THE STORAGE ROOM WELL VENTILATED?			2		
910	ARE THE MEDICINES ORGANIZED ACCORDING TO DATE OF EXPIRATION ("first expire, first out")?	YES, ALL MEDICINES YES, ONLY SOME MEDICINES NO	2			
911	What system does this facility use to monitor the amount of medicines received, the amount issued, and the amount present today?	NO.       S         COMPUTER SYSTEM UPDATED DAILY.       1         LEDGER/STOCK CARD UPDATED DAILY.       2         COMPUTER SYSTEM NOT UPDATED       2         DAILY, BUT THERE IS DAILY RECORD OF       3         LEDGER/STOCK CARD NOT UPDATED       3         DAILY, BUT THERE IS DAILY RECORD OF       5         DISTRIBUTED MEDICINES.       3         LEDGER/STOCK CARD NOT UPDATED       5         DAILY, BUT THERE IS DAILY RECORD OF       5         DISTRIBUTED MEDICINES.       4         OTHER SYSTEM (SPECIFY)       6				
			0			

#### SUPPLY ITEMS

912	Do you have the following supply items available in the facility/location today?	OBSERVED	REPORTED, NOT SEEN	NOT AVAILABLE
01	SINGLE-USE STANDARD DISPOSABLE SYRINGES WITH NEEDLES OR AUTO-DESTRUCT SYRINGES WITH NEEDLES	1	2	3
02	INFUSION SET FOR IV SOLUTION	1	2	3
03	CANULA FOR ADMINISTERING IV FLUIDS	1	2	3
04	LATEX GLOVES	1	2	3
05	ALCOHOL-BASED HAND RUB	1	2	3
06	HAND WASHING SOAP	1	2	3
07	DISINFECTING SOLUTION	1	2	3

# **SECTION 9.2: CONTRACEPTIVE COMMODITIES**

920	CHECK Q212 CONTRACEPTIVES STORED WITH OTHER MEDICINES IN COMMON LOCATION (RESPONSE 2 CIRCLED)	CONTRACEPTIVES STORED IN FP SERVICE AREA OR NOT STOCKED AT ALL IN FACILITY (RESPONSE 1 OR 3 CIRCLED) PROCEED TO NEXT SECTION (TB MEDS?)				
921*	Are any of the following <b>CONTRACEPTIVE commodities</b> available in the facility/location today?	(A) OBSERVED (B) NOT OBSERV AVAILABLE				/ED
	CHECK TO SEE IF AT LEAST ONE IS VALID (NOT EXPIRED)	AT LEAST ONE VALID	AVAILABLE NONE VALID	REPORTED AVAILABLE NOT SEEN	NOT AVAILABLE TODAY/DK	NEVER AVAILABLE
01	COMBINED ORAL CONTRACEPTIVE PILLS	1	2	3	4	5
02	PROGESTIN-ONLY CONTRACEPTIVE PILLS	1	2	3	4	5
03	COMBINED INJECTABLE CONTRACEPTIVES	1	2	3	4	5
04	PROJESTIN-ONLY INJECTABLE CONTRACEPTIVES (DEPO)	1	2	3	4	5
05	MALE CONDOMS	1	2	3	4	5
07	INTRAUTERINE CONTRACEPTIVE DEVICE	1	2	3	4	5
08	IMPLANT	1	2	3	4	5
09	EMERGENCY CONTRACEPTIVE PILLS (E.G., PROSTINOL 2)	1	2	3	4	5

### STORAGE CONDITION - CONTRACEPTIVE COMMODITIES

922	OBSERVE THE LOCATION WHERE CONTRACEPTIVE COMMODITIES A THE PRESENCE (OR ABSENCE) OF EACH OF THE FOLLOWING STOR	YES	NO	
01	ARE THE COMMODITIES OFF THE FLOOR?		1	2
02	ARE THE COMMODITIES PROTECTED FROM WATER		1	2
03	ARE THE COMMODITIES PROTECTED FROM THE SUN?		1	2
04	IS THE ROOM CLEAN OF EVIDENCE OF RODENTS (BATS, RATS) OR P	ESTS (ROACHES, ETC)?	1	2
05	IS THE STORAGE ROOM WELL VENTILATED?		1	2
923	ARE THE CONTRACEPTIVE COMMODITIES ORGANIZED ACCORDING TO DATE OF EXPIRATION ("first expire, first out") NOT ALL COMMODITIES NO			
924	What type of system does this facility use to monitor the amount of contraceptive commodities received, the amount issued, and the amount present today? ASK TO SEE THE SYSTEM AND RECORD OBSERVATION	COMPUTER SYSTEM UPDATED DAILY. LEDGER/STOCK CARD UPDATED DAILY. COMPUTER SYSTEM NOT UPDATED DAILY, BUT THERE IS DAILY RECORE DISTRIBUTED COMMODITIES. LEDGER/STOCK CARD NOT UPDATED DAILY, BUT THERE IS DAILY RECORE DISTRIBUTED COMMODITIES. OTHER SYSTEM (SPECIFY)		
925		PRESENTLY INTERVIE FAMILY PLANNING SERVIC HANK THE RESPONDENT IN THE FP SERVIC ND CONTINUE TO NEXT SECTION OR SERV		

### **SECTION 9.3: ANTI-TB DRUGS**

930	CHECK Q214 ANTI-TB MEDICINES STORED WITH OTHER MEDICINES IN COMMON LOCATION (RESPONSE 2 CIRCLED)	ANTI-TB MEDICINES STORED IN TB SERVICE AREA OR NOT STOCKED AT ALL IN FACILITY (RESPONSE 1 OR 3 CIRCLED)					
	•		PRO	DCEED TO NE	XT SECTION	<b>↓</b>	
931*	Are any of the following TB medicines available in the facility/location today?	(A) OBSERVED (B) NOT C AVAILABLE			NOT OBSER	OT OBSERVED	
	CHECK TO SEE IF AT LEAST ONE IS VALID (NOT EXPIRED)	AT LEAST ONE VALID	AVAILABLE NONE VALID	REPORTED AVAILABLE NOT SEEN	NOT AVAILABLE TODAY/DK	NEVER AVAILABLE	
01	ETHAMBUTOL TABS (E)	1	2	3	4	5	
02	ISONIAZID TABS (INH, H)	1	2	3	4	5	
03	PYRAZINAMIDE (Z)	1	2	3	4	5	
04	RIFAMPICIN (R)	1	2	3	4	5	
05	ISONIAZID + RIFAMPICIN	1	2	3	4	5	
06	ISONIAZID + ETHAMBUTOL (EH) (2FDC)	1	2	3	4	5	
07	ISONIAZID + RIFAMPICIN + PYRAZINAMIDE (RHZ) (3FDC)	1	2	3	4	5	
08	ISONIAZID + RIFAMPICIN + ETHAMBUTOL (RHE) (3FDC)	1	2	3	4	5	
09	ISONIAZID + RIFAMPICIN + PYRAZINAMIDE + ETHAMBUTOL (4FDC)	1	2	3	4	5	
10	STREPTOMYCIN INJECTABLE	1	2	3	4	5	
11*	ISONIAZID + THIACETAZONE TABLETS (150mg OR 450mg)	1	2	3	4	5	
935							
	PROCEED TO NEXT SECTION OR SERVICE SITE  THANK THE RESPONDENT IN THE TB SERVICE AREA AND CONTINUE TO NEXT SECTION OR SERVICE SITE						

# **MODULE 3: SERVICE-SPECIFIC READINESS**

# CHILD HEALTH SERVICES

# **SECTION 10: CHILD VACCINATION**

1000	CHECK Q102.01 CHILD CHILD VACCINATION SERVICES AVAILABLE	VACCINATION							
AS	ASK TO BE SHOWN THE MAIN LOCATION WHERE CHILD VACCINATION SERVICES ARE PROVIDED IN THE FACILI FIND THE PERSON MOST KNOWLEDGEABLE ABOUT CHILD VACCINATION SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.								
1001	Now I would like to ask you specifically about vaccination services for children under 5 years. For each of the following services, please tell me whether the service is offered by your facility, and if so, <i>how many days</i> per month the service is provided <i>at the facility, and how many days per month as outreach, if any.</i>								
	CHILD VACCINATION SERVICE (USE A 4-WEEK MONTH TO CALCULATE # OF DAYS	(a) # OF DAYS PER MONTH SERVICE IS PROVIDED AT FACILITY	(b) # OF DAYS F MONTH SERVICE IS THROUGH OUTI	PROVIDED					
01	Routine DPT+HepB+Hib (i.e., pentavalent)	# OF DAYS 00=NO SERVICE	# OF DAYS 00=NO SERVICE						
02	Routine polio vaccination (i.e., OPV)	# OF DAYS 00=NO SERVICE	# OF DAYS 00=NO SERVICE	0					
03	Routine measles vaccination (i.e., Measles - Rubella)	# OF DAYS 00=NO SERVICE	# OF DAYS 00=NO SERVICE						
04	BCG vaccination	# OF DAYS 00=NO SERVICE	# OF DAYS 00=NO SERVICE						
1002	Do you have the <i>national guidelines</i> for child vaccinations (i.e. EPI SOHAYIKA) available in this service area today?	YES		→ 1004					
1003	May I see the guidelines?	OBSERVED		→ 1006					
1004	Do you have <b>any other guidelines</b> for child vaccinations available in this service area today?	YES NO		→ 1006					
1005	May I see the other guidelines?	OBSERVED							
1006	ASK YOUR RESPONDENT TO SHOW YOU ITEMS REQUIRED FOR VACCINATION SERVICES	OBSERVED REPORTE NOT SEE							
01	Blank/unused individual child vaccination cards or booklets (EPI card)	1 2	3						
02	Tally sheets	1 2	3						
03	Summary forms / monthly report	1 2	3						

1007	Does this facility routinely store any vaccines, or are all its vaccines either picked up from another facility or delivered when services are being provided?	ROUTINELY STORE VACCINES.1STORES NO VACCINES.2				→ 1014	
1008	ASK TO BE TAKEN TO THE AREA WHERE VACCINES ARE STORED. ASK TO SEE THE VACCINE REFRIGERATOR.	REFRIGERATOR OBSERVED 1 REFRIGERATOR NOT OBSERVED 2				→ 1014	
1009	Do you maintain a cold-chain temperature monitoring chart?	YES				→ 1012	
1010	May I see the cold-chain temperature monitoring chart?	OBSERVED				→ 1012	
1011	CHECK WHETHER THE TEMPERATURE RECORD WAS COMPLETED TWICE DAILY FOR EACH OF THE PAST 30 DAYS, INCLUDING WEEKENDS AND PUBLIC HOLIDAYS.	YES, COMPLETED 1 NO, NOT COMPLETED 2					
1012	Please tell me if each of the following vaccines is available in the facility today. If available, I would like to see it.		(A) OBSERVED (B) NOT OB AVAILABLE			RVED	
	IF AVAILABLE, CHECK TO SEE IF AT LEAST ONE IS VALID (NOT EXPIRED, VACCINE VIAL MONITOR UNCHANGED (NOT FROZE			REPORTED AVAILABLE NOT SEEN	AVAILABLE	NEVER AVAILABLE	
01	DPT+HepB+Hib [PENTAVALENT]	1	2	3	4	5	
02	ORAL POLIO VACCINE (i.e., OPV)	1	2	3	4	5	
03	MEASLES VACCINE AND DILUENT (i.e., MR)	1	2	3	4	5	
04	BCG VACCINE AND DILUENT	1	2	3	4	5	
1013	WHAT IS THE TEMPERATURE IN THE VACCINE REFRIGERATOR?	ABOVE +8 BELOW +	3 DEGREES. 2 DEGREES.	DEGREES FUNCTIONAL			
1014	How many vaccine carriers do you have? ASK TO SEE THE VACCINE CARRIERS. REPORTED RESPONSE FROM KNOWLEDGEABLE RESPONDENT IS ACCEPTABLE.	ONE.       1         TWO OR MORE SETS.       2         NONE.       3			→ 1050		
1015	How many sets of ice packs or cool water packs do you have? ASK TO SEE THE ICE PACKS. REPORTED RESPONSEACCEPTABLE NOTE: 4-5 ICE PACKS MAKE ONE SET	ONE SET.         1           TWO OR MORE SETS.         2           NO ICE PACKS, USE PURCHASED ICE.         3           NO ICE PACKS.         4					

#### STANDARD PRECAUTIONS

1050	ASSESS THE ROOM OR AREA FOR THE ITEMS LISTED BELOW. FOR ITEMS THAT YOU DO NOT SEE, ASK YOUR RESPONDENT TO SHOW THEM TO YOU. IF THE SAME ROOM OR AREA HAS ALREADY BEEN ASSESSED, INDICATE WHERE THE DATA ARE RECORDED	CHILD C FAMILY ANTENA DELIVEI D TUBERC NCD [Q2	GENERAL INFORMATION [Q710].       11         CHILD CURATIVE CARE [Q1251].       13         FAMILY PLANNING [Q1351].       14         ANTENATAL CARE [Q1451].       15         DELIVERY [Q1651].       17         TUBERCULOSIS [Q1951].       19         NCD [Q2351].       22         NOT PREVIOUSLY SEEN.       31				
1051	STANDARD PRECAUTIONS AND CONDITIONS FOR CLIENT EXAMINATION	OBSERVED	REPORTED, NOT SEEN	NOT AVAILABLE			
01	RUNNING WATER (PIPED, BUCKET WITH TAP OR POUR P	PITCHER)	1	2	3		
02	HAND-WASHING SOAP (MAY BE LIQUID SOAP)		1	2	3		
03	ALCOHOL-BASED HAND RUB		1	2	3		
04	WASTE RECEPTACLE (PEDAL BIN) WITH LID AND PLAST	1 06 ◀	2	3			
05	OTHER WASTE RECEPTACLE	1	2	3			
06	SHARPS CONTAINER ("SAFETY BOX")		1	2	3		
07	DISPOSABLE LATEX GLOVES		1	2	3		
08	DISINFECTANT/ANTISEPTICS [E.G., CHLORINE, HIBITANE	, ALCOHOL]	1	2	3		
09	SINGLE-USE STANDARD DISPOSABLE SYRINGES WITH N AUTO-DISABLE SYRINGES WITH NEEDLES	EEDLES OR	1	2	3		
10	MEDICAL MASKS		1	2	3		
11	GOWNS		1	2	3		
12	EYE PROTECTION [GOGGLES OR FACE PROTECTION]		1	2	3		
13	GUIDELINES FOR STANDARD PRECAUTIONS			2	3		
1052	DESCRIBE THE SETTING OF THE CHILD VACCINATION SERVICE DELIVERY ROOM OR AREA.	ON PRIVATE ROOM					
	THANK YOUR RESPONDENT AND MOVE TO YOUR NEXT DATA COLLECTION POINT IF DIFFERENT FROM CURRENT LOCATION.						

# SECTION 11: CHILD GROWTH MONITORING SERVICES

1100	CHECK Q102.02	GROWTH MON SERVICES AV				RING SER			
	ASK TO BE SHOWN THE MAIN	LOCATION WH	HERE GROW				-	THE	
FA	FACILITY. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT GROWTH MONITORING SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.								
1101	Please tell me the number of days per monitoring services are offered in this and the number of days per month as USE A 4-WEEK MONTH TO CALCU	s facility, s outreach, if any.			(a) # OF DAYS PE MONTH SERVIC ROVIDED AT FAC	E IS	(b) # OF DAYS PER MONTH SERVICE IS PROVIDED THROUGH OUTREACH		
01	Child growth monitoring			#	OF DAYS		# OF DAYS 00=NO SERVICE		
1102	Do you have any guidelines for growt in this service area today?	h monitoring avail	lable	_	JIDELINE AVAIL			→ 1104	
1103	May I see the guidelines for growth m (family health card)	ionitoring?			OBSERVED				
1104	I would like to know if the following items are available			(A) AVAILAE	AVAILABLE		(B) FUNCTIONI		
	in this service area and are functioning. I would like to see them.	(	OBSERVED	REPORTE NOT SEE	-	YES	NO	DON'T KNOW	
01	CHILD WEIGHING SCALE (250GRAM GRADATION)		1 <b>→</b> b	2 <b>→</b> b	<sup>3</sup> <sub>02</sub> ◀	1	2	8	
02	INFANT WEIGHING SCALE (100 GRAM GRADATION)		1 <b>→</b> b	2 <b>→</b> b	<sup>3</sup> 03◀	1	2	8	
03	HEIGHT OR LENGTH BOARD		1 <b>→</b> b	2 <b>→</b> b	3 04 ◀	1	2	8	
04	TAPE FOR MEASURING HEAD CIR	CUMFERENCE	1	2	3				
05	GROWTH CHARTS		1	2	3				
	THANK YOUR RESPONDENT AND CURRENT LOCATION.	MOVE TO YOUR	NEXT DATA (	COLLECTIO	N POINT IF DIFF	ERENT FRO	DM		

	SECTIC	N 12: CHILD CUR	ATIVE CAP	RE SEF	RV	ICES		
1200	CHECK Q102.03	CURATIVE CARE SERVICES AVAILABLE		NO CURATIVE CARE SERVICES				
	ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE CURATIVE CARE SERVICES ARE PROVIDE FIND THE PERSON MOST KNOWLEDGEABLE ABOUT CURATIVE CARE SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTION							
1201	offered in this facility, and the number of days per month as outreach, if any.MONTH SERVICE IS PROVIDED AT FACILITYMONTH					(b) # OF DAYS I TH SERVICE ROUGH OUT (VILLAGE LE <sup>N</sup> ACTIVITIE	IS PROVIDEE REACH /EL)	
01	Consultation or curative	care services for sick children	# OF DAYS		00	OF DAYS D=NO ERVICE		
1202	Please tell me if provider	s of child health services in this facility prov	vide the following services			YES	NO	
01	DIAGNOSE AND/OR TR	EAT CHILD MALNUTRITION				1	2	
02	PROVIDE VITAMIN A SI	JPPLEMENTATION TO CHILDREN				1	2	
03		EMENTATION TO CHILDREN				1	2	
04						1	2	
05*						1	2	
1203	Do providers of services	for sick children in this facility s in the provision of services to		YES 1 NO 2				
1204		<i>iidelines (chart booklet)</i> for the diagnosis thood illnesses available in this		YES 1 NO 2				
1205	May I see the IMCI guide	lines?		OBSERVED.         1           REPORTED NOT SEEN.         2				
1206		<b>guidelines</b> for the diagnosis and dillnesses available in this		YES				
1207	May I see the other guide	elines?	OBSERVED REPORTED NOT					
1208	and parameters are rout before the consultation for IF YES, ASK TO SEE TH	system whereby certain observations nely carried out on sick children or the presenting illness? IE PLACE WHERE THESE SE BEFORE THE CONSULTATION		YES 1 NO 2				
1209	ROUTINELY. IF YOU DO	W ACTIVITIES ARE BEING DONE O NOT SEE AN ACTIVITY, ASK: OT SEE] routinely conducted for		ACTIVITY				
	all sick children?	OT SEE routinely conducted for	ACTIVITY OBSERVED	REPORTED NOT SEEN		ROUTINELY	DON'T KNOW	
01	Weighing the child		1	2		3	8	
02	Plotting child's weight on	0 1	1	2		3	8	
03	Taking child's temperatu		1	2		3	8	
04	Assessing child's vaccin	ation status	1	2		3	8	
05	Providing group health e	ducation	1	2		3	8	
06	Administer fever-reducin	g medicines and/or sponge for fever	1	2		3	8	
07	based on the severity of		1	2		3	8	
08*	Perform Malaria testing f	or children	1	2		3	8	
1210	I would like to know if the following items are		(A) AVAILABLE		(	B) FUNCTION	NING	
------	--	--------------	----------------------	------------------	-----	-------------	---------------	
	available in this service area. I would like to see them. For equipment and instruments, I would like to know if they are functioning.	OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW	
01	CHILD WEIGHING SCALE (250GRAM GRADATION)	1 <b>→</b> b	2 <b>→</b> b	3 02◀	1	2	8	
02	INFANT WEIGHING SCALE (100 GRAM GRADATION)	1 <b>→</b> b	2 <b>→</b> b	3 03 ◀	1	2	8	
03	THERMOMETER	1 <b>→</b> b	2 <b>→</b> b	3 04 ◀	1	2	8	
04	STETHOSCOPE	1 <b>→</b> b	2 → b	3 05◀	1	2	8	
05	Timer or watch with seconds hand	1 <b>→</b> b	2 → b	3 06 ◀	1	2	8	
06	Staff has watch with seconds hand or other device (e.g., cell phone) that can measure seconds	1	2	3				
07	Calibrated 1/2 or 1-liter measuring jar for ORS	1	2	3				
08	Cup and spoon	1	2	3				
09	ORS PACKETS OR SACHETS	1	2	3				
10	At least 3 buckets (for cleaning used cups)	1	2	3				
11	Examination bed or couch	1	2	3				
1211	Please tell me if you have any of the following materials. IF YES, ASK TO SEE							
01	IMCI chart booklet	1	2	3				
02	IMCI mother's cards (IMCI card)	1	2	3				
03	Other visual aids for teaching caretakers	1	2	3				
1212	Are individual health records (i.e., child welfare card or booklet) for sick children maintained at this service site?			YES 1 NO				
1213	May I see an unused copy of the individual records?							

1250	BELOW. FOR ITEMS THAT YOU DO NOT SEE, ASK YOUR RESPONDENT TO SHOW THEM TO YOU. IF THE SAME ROOM OR AREA HAS ALREADY BEEN ASSESSED, INDICATE WHERE THE DATA ARE RECORDED NCD [Q2351].				Q710]11 51]12 14 14 15 17 19 22 31	XT SECTION / SERV		
1251	STANDARD PRECAUTIONS AND CONDITIONS FOR CLIENT EXAMINATION	OBSERVED	REPORTED, NOT SEEN	NOT AVAILABLE				
01	RUNNING WATER (PIPED, BUCKET WITH TAP OR POUR F	1	2	3				
02	HAND-WASHING SOAP (MAY BE LIQUID SOAP)	1	2	3				
03	ALCOHOL-BASED HAND RUB	1	2	3				
04	WASTE RECEPTACLE (PEDAL BIN) WITH LID AND PLASTIC BIN LINER				2	3		
05	OTHER WASTE RECEPTACLE				2	3		
06	SHARPS CONTAINER ("SAFETY BOX")				2	3		
07	DISPOSABLE LATEX GLOVES			1	2	3		
08	DISINFECTANT/ANTISEPTICS [E.G., CHLORINE, HIBITANE	E, ALCOHOL]		1	2	3		
09	SINGLE-USE STANDARD DISPOSABLE SYRINGES WITH N AUTO-DISABLE SYRINGES WITH NEEDLES	NEEDLES OR		1	2	3		
10	MEDICAL MASKS			1	2	3		
11	GOWNS			1	2	3		
12	EYE PROTECTION [GOGGLES OR FACE PROTECTION]			1	2	3		
13	GUIDELINES FOR STANDARD PRECAUTIONS			1	2	3		
1252	DESCRIBE THE SETTING OF THE SICK CHILD       PRIVATE ROOM.       1         SERVICE DELIVERY ROOM OR AREA.       OTHER ROOM WITH       1         AUDITORY AND VISUAL PRIVACY.       2         VISUAL PRIVACY ONLY.       3         NO PRIVACY.       4							
	THANK YOUR RESPONDENT AND MOVE TO YOUR NEXT DATA COLLECTION POINT IF DIFFERENT FROM CURRENT LOCATION.							

# SECTION 13: FAMILY PLANNING

1300								
	FAMILY PLANNING SERVICES	] PI	ANNING SERVICES					
	Ļ	NEXT SECTION OR SERVICE SITE ←						
	ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHE FIND THE PERSON MOST KNOWLEDGEABLE ABOUT FA INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE S	MILY PLANNING S	SERVICES IN THE FA	CILITY.				
1301	How many days in a month are family planning services offered at this facility?	NUMBER OF DAYS						
	USE A 4-WEEK MONTH TO CALCULATE # OF DAYS							
1302	Does this facility <b>provide</b> (i.e., stock the commodity) or <b>prescribe, counsel or refer clients for</b> any of the following modern methods of family planning:	PROVIDE (STOCK THE COMMODITY)	PRESCRIBE/ COUNSEL, OR REFER		NO			
01	COMBINED ORAL CONTRACEPTIVE PILLS	1	2		3			
02	PROGESTIN-ONLY CONTRACEPTIVE PILLS	1	2		3			
03	COMBINED INJECTABLE CONTRACEPTIVES	1	2		3			
04	PROGESTIN-ONLY INJECTABLE CONTRACEPTIVES (DEPO)	1	2		3			
05	MALE CONDOMS	1	2		3			
07	INTRAUTERINE CONTRACEPTIVE DEVICE (IUCD)	1	2		3			
08	IMPLANT	1	2		3			
09	EMERGENCY CONTRACEPTIVE PILLS (E.G., PROSTINOL 2)	1	2		3			
11	COUNSEL CLIENTS ON PERIODIC ABSTINENCE		2		3			
12	VASECTOMY (MALE STERILIZATION)	1	2		3			
13	TUBAL LIGATION (FEMALE STERILIZATION)	1	2		3			
14	OTHER METHODS (E.G., SPERMICIDE OR DIAGPHRAGM)	1	2		3			
15*	COUNSEL CLIENTS ON LACTATION AMENORRHEA (LAM)		2		3			
1303	Do you have the <b>national family planning guidelines</b> available at this service area today?				→ 1305			
1304	May I see the national family planning guidelines?				→ 1307			
1305	Do you have <b>any other guidelines</b> on family planning available at this service area today?				→ 1307			
1306	May I see the other guidelines? (e.g., IUCD card, IMPLANT card etc.,)							
1307	Are individual records or cards (e.g., IUCD card, IMPLANT card, etc.,) maintained at this service site for family planning clients?				→ 1309			
1308	May I see a blank copy of the individual records or card?		EEN					

1309	Does this facility have a system whereby certain observations and parameters are routinely carried out on family planning clients before the consultation takes place? IF YES, ASK TO SEE THE PLACE WHERE THESE ACTIVITIES TAKE PLACE.	YES NO			→ 1311
1310	OBSERVE IF THE BELOW ACTIVITIES ARE BEING DONE ROUTINELY. IF YOU DO NOT SEE AN ACTIVITY, ASK: Is [ACTIVITY YOU DO NOT SEE] routinely done for all family planning clients?	ACTIVITY OBSERVED	ACTIVITY REPORTED NOT SEEN	ACTIVITY NOT ROUTINELY DONE	DON'T KNOW
01	Weighing of clients	1	2	3	8
02	Taking blood pressure	1	2	3	8
03	Conducting group health education sessions	1	2	3	8
1311	Do family planning providers in this facility routinely diagnose and treat RTIs/STIs, or are RTIs/STIs clients referred to another provider or location for STI diagnosis and treatment? PROBE TO ARRIVE AT THE RIGHT ANSWER	DIAGNOSE BUT FOR TREATM REFER ELSEWHEN AND TREATM REFER OUTSIDE F	REFER ELSEWH MENT RE IN FACILITY FO IENT FACILITY FOR DIA		2 3 4

## EQUIPMENT AND SUPPLIES

1314	I would like to know if the		(A) AVAILABI	LE		(B) FUNCTIONI	NG
	following items are available in this service area today and are functioning	OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW
01	DIGITAL BP APPARATUS	1 <b>→</b> b	2 → b	<sup>3</sup>	1	2	8
02	MANUAL BP APPARATUS	1 <b>→</b> b	2 → b	<sup>3</sup> _ 03 ◀	1	2	8
03	STETHOSCOPE	1 <b>→</b> b	2 → b	<sup>3</sup> _ 04 ◀	1	2	8
04	EXAMINATION LIGHT (FLASHLIGHT OK)	1 <b>→</b> b	2 → b	<sup>3</sup> _ 05 ◀	1	2	8
05	EXAMINATION BED OR COUCH	1	2	3			
06	SAMPLE OF FP METHODS	1	2	3			
07	OTHER FP-SPECIFIC VISUAL AIDS [E.G., FLIP CHARTS, LEAFLETS]	1	2	3			
08	PELVIC MODEL FOR IUCD	1	2	3			
09	MODEL FOR SHOWING CONDOM USE	1	2	3			

1315	CHECK Q1302.07 & Q1302.08. IUCD OR IMPLANT PROVIDED IN FACILITY		1321		
	ASK TO BE TAKEN TO THE ROOM OR LOCATION WHERE IUCDS AND	/OR IMPLANTS AR	E INSERTED OR RI	EMOVED	
1316	Please show me the following items for the provision of IUCD or Implant methods:	OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	
01	STERILE GLOVES	1	2	3	
02	ANTISEPTIC SOLUTION (E.G., POVIDON IODINE)	1	2	3	
03	SPONGE HOLDING FORCEPS	1	2	3	
04	STERILE GAUZE PAD OR COTTON WOOL	1	2	3	
05*	GALLIPOT (FOR ANTISEPTIC SOLUTION)	1	2	3	
1317	CHECK Q1302.07 IUCD PROVIDED IN FACILITY		IUCD PROVIDED IN FAC		→ 1319
1318	Please show me the following items for the provision of IUCD:	OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	
01	CUSCO VAGINAL SPECULUM - SMALL	1	2	3	
02	CUSCO VAGINAL SPECULUM - MEDIUM	1	2	3	
03	CUSCO VAGINAL SPECULUM - LARGE	1	2	3	
04	TENACULM (VOLSELLUM FORCEPS)	1	2	3	
05	UTERINE SOUND	1	2	3	
06*	STRAIGHT ARTERY FORCEPS	1	2	3	
07*	STRAIGHT CUTTING SCISSORS	1	2	3	
08*	HIGH STOOL FOR SITTING	1	2	3	
09*	0.5% CHLORINE SOLUTION IN RED BUCKET WITH LID	1	2	3	
10*	BLUE BUCKET (FOR WASTE DISPOSAL)	1	2	3	
11*	IUCD IN STERILE PACKAGING	1	2	3	
1319	CHECK Q1302.08. IMPLANT PROVIDED IN FACILITY		IMPLANT PROVIDED IN FAC		► 1321
1320	Please show me the following items for the provision of Implant:	OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	
01	LOCAL ANESTHETIC (E.G., 1% LIDOKAINE)	1	2	3	
02	STERILE SYRINGE AND NEEDLE	1	2	3	
03	CANULA AND TROCHAR FOR INSERTING IMPLANT	1	2	3	
04	SEALED IMPLANT PACK	1	2	3	
05	SCAPEL WITH BLADE (SURGICAL BLADE WITH HANDLE)	1	2	3	
06	MINOR SURGERY KIT (E.G., WITH ARTERY FORCEPS)	1	2	3	
07*	ARM REST / SIDE TABLE	1	2	3	
08*	MARKER PEN	1	2	3	
09*	SURGICAL DRAPE	1	2	3	
10*	NORMAL BANDAGE OR BUTTERFLY BANDAGE	1	2	3	
11*	BAND AID	1	2	3	
12*	ELASTOMETRIC MATTRESS DRESSING	1	2	3	

1321	Where are equipment such as specula or forceps that are used in the provision of family planning services processed for re-use?	FP SERVICE SITE.1CENTRAL LOCATION IN FACILITY.2BOTH LOCATIONS.3NO EQUIPMENT PROCESSED1IN FACILITY.4	→ 1350 → 1350
1322	What is the final processing method used for family planning equipment at this service site? PROBE FOR ALL METHODS USED	AUTOCLAVE.ADRY HEAT STERILIZATION.BSOAK IN CHLORINE SOLUTION.CBOIL OR STEAM.DWASH WITH SOAP AND WATER.ESOAK IN OTHER CHEMICAL SOLUTION.F	

1350	ASSESS THE ROOM OR AREA FOR THE ITEMS LISTED BELOW. FOR ITEMS THAT YOU DO NOT SEE, ASK YOUR RESPONDENT TO SHOW THEM TO YOU. IF THE SAME ROOM OR AREA HAS ALREADY BEEN ASSESSED, INDICATE WHERE THE DATA ARE RECORDED	NFORMATION [4 CINATION [Q105 ATIVE CARE [Q . CARE [Q1451] Q1651] DSIS [Q1951] ] DUSLY SEEN	1353					
1351	STANDARD PRECAUTIONS AND CONDITIONS FOR CLIENT EXAMINATION	OBSERVED	REPORTED, NOT SEEN	NOT AVAILABLE				
01	RUNNING WATER (PIPED, BUCKET WITH TAP OR POUR PITCHER)	)	1	2	3			
02	HAND-WASHING SOAP (MAY BE LIQUID SOAP)		1	2	3			
03	ALCOHOL-BASED HAND RUB		1	2	3			
04	WASTE RECEPTACLE (PEDAL BIN) WITH LID AND PLASTIC BIN LI	1 _ 06 ◀	2	3				
05	OTHER WASTE RECEPTACLE	1	2	3				
06	SHARPS CONTAINER ("SAFETY BOX")	1	2	3				
07	DISPOSABLE LATEX GLOVES	1	2	3				
08	DISINFECTANT/ANTISEPTICS [E.G., CHLORINE, HIBITANE, ALCOH	DL]	1	2	3			
09	SINGLE USE STANDARD DISPOSABLE SYRINGES WITH NEEDLES OR AUTO-DISABLE SYRINGES WITH NEEDLES		1	2	3			
10	MEDICAL MASKS		1	2	3			
11	GOWNS		1	2	3			
12	EYE PROTECTION [GOGGLES OR FACE PROTECTION]		1	2	3			
13	GUIDELINES FOR STANDARD PRECAUTIONS		1	2	3			
1352	2       DESCRIBE THE SETTING OF THE FP SERVICE       PRIVATE ROOM							
1353	CHECK Q212 FP COMMODITIES STORED IN OTHER LOCATION OR NOT STOCKED (RESPONSE 1 NOT CIRCLED)							

	VASE	ECTOMY AN	D TUBAL LIG	ATION (TUBE	CTOMY)				
1353A	CHECK Q1302.12				VASECTO PROVIDED IN		→ 1353F		
	ASK TO BE SHOWN THE FIND THE PERSON N INTRODUCE YOURSELF, E	OST KNOWLE	DGEABLE ABOUT	VASECTOMY SE	RVICES IN TH	HE FACILITY.			
1353B	I would like to know if the following functioning. If any of the items and						ey are		
	BELOW. FOR ITEMS THAT YOU ASK YOUR RESPONDENT TO S	SSESS THE ROOM OR AREA FOR THE ITEMS LISTED ELOW. FOR ITEMS THAT YOU DO NOT SEE, SK YOUR RESPONDENT TO SHOW THEM TO YOU. THE SAME ROOM OR AREA HAS ALREADY BEEN ASSESSED IDICATE WHERE THE DATA ARE RECORDED. IF NOT				ROOM / AREA ASSESSED IN Q1353H 11 ROOM / AREA NOT PREVIOUSLY ASSESSEE 31			
	INDICATE WHERE THE DATA A PREVIOUSLY ASSESSED, CIRC				1				
1353C			(A) AVAILABLE			(B) FUNCTIONIN	IG		
		OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW		
01*	OPERATING THEATRE TABLE	1 <b>→</b> b	2 → b	3	1	2	8		
02*	OPERATING THEATRE LIGHT	1 <b>→</b> b	2 → b	3	1	2	8		
03*	INSTRUMENT TROLLEY	1 <b>→</b> b	2 → b	3	1	2	8		
04*	STERILIZER DRUM	1→b	2 → b	3	1	2	8		
05*	BIG CURVE SCISSORS FOR CUTTING GAUZE OR BANDAGE	1 <b>→</b> b	2 🔶 b	3	1	2	8		
06*	SCISSORS FOR CUTTING CLOTH	1 <b>→</b> b	2 → b	3	1	2	8		
07*	DIGITAL BP APPARATUS	1 <b>→</b> b	2 → b	3	1	2	8		
09*	MANUAL BP APPARATUS	1→b	2 → b	3	1	2	8		
10*	STETHOSCOPE	1 <b>→</b> b	2 → b	3	1	2	8		
11*	WEIGHING SCALE (ADULT)	1 <b>→</b> b	2 → b	3	1	2	8		
12*	GALLIPOT OR CUP FOR ANTISEPTIC SOLUTION	1	2	3					
13*	KIDNEY TRAY	1	2	3					
14*	INSTRUMENT FOR PV EXAMINATION	1	2	3					
15*	LIFTER AND LIFTER JAR	1	2	3					
16*	DRESSING JAR WITH LID/COVE	R 1	2	3					
17*	SALINE STAND	1	2	3					
18*	TALQUEST BOOK	1	2	3					
19*	IRON COT	1	2	3					
20*	THERMOMETER	1 <b>→</b> b	2 → b	3	1	2	8		
21*	GOWN FOR CLIENTS	1	2	3					

		(A) AVAILABLE			(B) FUNCTIONING			
		OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW	
22*	GOWN FOR PROVIDER	1	2	3				
23*	TROLLEY SHEET	1	2	3				
24*	DRAW SHEET	1	2	3				
25*	CAP	1	2	3				
26*	MASK	1	2	3				
27*	GLOVES COVER	1	2	3				
28*	BED SHEET	1	2	3				
29*	BLANKET	1	2	3				
30*	MATTRESS	1	2	3				
31*	PILLOW WITH COVER	1	2	3				
32*	MOSQUITO NET	1	2	3				
33*	CURTAIN	1	2	3				
34*	COTTON	1	2	3				
35*	SURGICAL GAUZE	1	2	3				
36*	POVIDON IODINE SOLUTION	1	2	3				
37*	SURGICAL GLOVES (SIZE 6.5)	1	2	3				
38*	SURGICAL GLOVES (SIZE 7)	1	2	3				
39*	DISPOSABLE STERILE SYRINGE (5 ML)	1	2	3				
40*	DISPOSABLE STERILE SYRINGE (10 ML)	1	2	3				
41*	URISTICK GP (FOR GLUCOSE/ALBUMIN TEST	1	2	3				
42*	ELASTOMETRIC DRESSING MATTRESS SIZE 10	1	2	3				
43*	DISPOSABLE STERILE LANCET	1	2	3				
44*	SILK THREAD	1	2	3				

1353D	Do you have any of the following		(A) AVAILAE	ILE		<u>(</u> B)	FUNCTIONIN	١G
	items available at this service site today? If available I will like to see them. For some of the items I will like to know if they are functioning.	OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE		YES	NO	DON'T KNOW
1*	NON-SURGICAL VASECTOMY KIT	1	2	3				
2*	RING FORCEPS***	1 <b>→</b> b	2 → b	3		1	2	8
3*	VAS DISECTING FORCEPS***	1 <b>→</b> b	2 → b	3		1	2	8
4*	SMALL SURGICAL SCISSORS**	* 1 <i>→</i> b	2 → b	3		1	2	8
5*	CONDOM	1	2	3				
1353E	Please tell me if any of the followir are available at this services site t	•		(A) OBSERVED AVAILABLE		(B) NOT OBSERVED		
	I would like to see them. CHECK TO SEE IF AT LEAST ONE IS VALID (NOT EXPIRED)			AT LEAST ONE VALID		REPORTED AVAILABLE NOT SEEN	NOT AVAILABLE TODAY/DK	NO, OR NEVER AVAILABLE
01*	INJECTION XYLOCAINE 1%			1	2	3	4	5
02*	ANTIBIOTIC (CIPROFLOXACIN OR AZITHROMYCIN)			1	2	3	4	5
03*	PARACETAMOL TABLETS			1	2	3	4	5
04*	VITAMIN B-COMPLEX TABLETS			1	2	3	4	5

1353F	CHECK Q1302.13 TU	BAL LIGATION (TI PROVIDED			LIGATION (TU T PROVIDED I	· · · · ·	▶ 1400
	TO BE SHOWN THE LOCATIO IND THE PERSON MOST KNO INTRODUCE YOURSELF, E	OWLEDGEABLE	ABOUT TUBECT	OMY / TUBAL LIGA	TION SERVIO	CES IN THE FA	ACILITY.
1353G	I would like to know if the following functioninng. If any of the items ar						ey are
	ASSESS THE ROOM OR AREA BELOW. FOR ITEMS THAT YOU ASK YOUR RESPONDENT TO S	DO NOT SEE,		ROOM / AREA ASSESSED IN Q1353C 11 ROOM / AREA NOT PREVIOUSLY ASSESSEE 31 →1353I			
	IF THE SAME ROOM OR AREA INDICATE WHERE THE DATA A PREVIOUSLY ASSESSED, CIRC SITE	RE RECORDED. I	FNOT				
1353H			(A) AVAILABLE			(B) FUNCTIONIN	IG
		OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW
01*	OPERATING THEATRE TABLE	1 <b>→</b> b	2 → b	3	1	2	8
02*	OPERATING THEATRE LIGHT	1 <b>→</b> b	2 → b	3	1	2	8
03*	INSTRUMENT TROLLEY	1 <b>→</b> b	2 → b	3	1	2	8
04*	STERILIZER DRUM	1 <b>→</b> b	2 🔶 b	3	1	2	8
05*	BIG CURVE SCISSORS FOR CUTTING GAUZE OR BANDAGE	1 <b>→</b> b	2 → b	3	1	2	8
06*	SCISSORS FOR CUTTING CLOTH	1 <b>→</b> b	2 → b	3	1	2	8
07*	DIGITAL BP APPARATUS	1 <b>→</b> b	2 🔶 b	3	1	2	8
09*	MANUAL BP APPARATUS	1 <b>→</b> b	2 🔸 b	3	1	2	8
10*	STETHOSCOPE	1 <b>→</b> b	2 🔶 b	3	1	2	8
11*	WEIGHING SCALE (ADULT)	1 <b>→</b> b	2 → b	3	1	2	8
12*	GALLIPOT OR CUP FOR ANTISEPTIC SOLUTION	1	2	3			
13*	KIDNEY TRAY	1	2	3			
14*	INSTRUMENT FOR PV EXAMINATION	1	2	3			
15*	LIFTER AND LIFTER JAR	1	2	3			
16*	DRESSING JAR WITH LID/COVE	R 1	2	3			
17*	SALINE STAND	1	2	3			
18*	TALQUEST BOOK	1	2	3			
19*	IRON COT	1	2	3			
20*	THERMOMETER	1 <b>→</b> b	2 → b	3	1	2	8
21*	GOWN FOR CLIENTS						

		(A) AVAILABLE				(B) FUNCTIONI	NG
		OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW
22*	GOWN FOR PROVIDER	1	2	3			
23*	TROLLEY SHEET	1	2	3			
24*	DRAW SHEET	1	2	3			
25*	CAP	1	2	3			
26*	MASK	1	2	3			
27*	GLOVES COVER	1	2	3			
28*	BED SHEET	1	2	3			
29*	BLANKET	1	2	3			
30*	MATTRESS	1	2	3			
31*	PILLOW WITH COVER	1	2	3			
32*	MOSQUITO NET	1	2	3			
33*	CURTAIN	1	2	3			
34*	COTTON	1	2	3			
35*	SURGICAL GAUZE	1	2	3			
36*	POVIDON IODINE SOLUTION	1	2	3			
37*	SURGICAL GLOVES (SIZE 6.5)	1	2	3			
38*	SURGICAL GLOVES (SIZE 7)	1	2	3			
39*	DISPOSABLE STERILE SYRINGE (5 ML)	1	2	3			
40*	DISPOSABLE STERILE SYRINGE (10 ML)	1	2	3			
41*	URISTICK GP (FOR GLUCOSE/ALBUMIN TEST	1 [)	2	3			
42*	ELASTOMETRIC DRESSING MATTRESS SIZE 10	1	2	3			
43*	DISPOSABLE STERILE LANCET	1	2	3			
44*	SILK THREAD	1	2	3			

1353I	Do you have any of the following		(A) AVAILAB	LE		(B) FUNCTIONING			
	items available at this service site today? If available I will like to see them. For some of the items I will like to know if they are functioning.	OBSERVED	REPORTED NOT SEEN	NOT AVAILAB	BLE	YES	NO	Don't Know	
01*	TUBECTOMY KIT	1	2	3					
02*	BP HANDLE***	1 <b>→</b> b	2 → b	3		1	2	8	
03*	NEEDLE HOLDER***	1 <b>→</b> b	2 → b	3		1	2	8	
04*	BABOCK TISSUE FORCEP***	1 <b>→</b> b	2 → b	3		1	2	8	
05*	LONG STRAIGHT ARTERY FORCEP (MEDIUM)***	1 <b>→</b> b	2 → b	3		1	2	8	
06*	CURVED MOSQUITO ARTERY FORCEP***	1 <b>→</b> b	2 → b	3		1	2	8	
07*	ALICE TISSUE FORCEP***	1 <b>→</b> b	2 → b	3		1	2	8	
08*	PLAIN DISECTING FORCEP***	1 <b>→</b> b	2 → b	3		1	2	8	
09*	TOOTH DISECTING FORCEP***	1 <b>→</b> b	2 → b	3		1	2	8	
10*	MAYO SCISSORS***	1 <b>→</b> b	2 → b	3		1	2	8	
11*	SPONGE HOLDING FORCEP***	1 <b>→</b> b	2 → b	3		1	2	8	
12*	RETRACTOR***	1 <b>→</b> b	2 → b	3		1	2	8	
13*	STERILE CHROMIC CATGUT	1	2	3					
14*	STERILE SURGICAL BLADE SIZE 10	1	2	3					
15*	CUTTING CURVED NEEDLE	1	2	3					
16*	CUTTING STRAIGHT NEEDLE	1	2	3					
17*	CURVED ROUND BODY NEEDLE	1	2	3					
1353J	Please tell me if any of the followin are available at this services site t	-		(A) OBSE AVAILA			) NOT OBSEI		
	I would like to see them. CHECK TO SEE IF AT LEAST Of (NOT EXPIRED)	NE IS VALID		AT LEAST ONE VALID		REPORTED AVAILABLE NOT SEEN		NO, OR NEVER AVAILABLE	
01*	INJECTION ATROPINE SULPHA	TE (0.6MG/ML)		1	2	3	4	5	
02*	INJECTION PROMETHAZINE (12	2.5MG/ML)		1	2	3	4	5	
03*	INJECTION PETHIDINE (25MG/M	/L)		1	2	3	4	5	
04*	INJECTION PENTAJOSIN (30MG	G/ML)		1	2	3	4	5	
05*	INJECTION XYLOCAINE (1%)			1	2	3	4	5	
06*	DIAZEPAM TABLETS (5MG)			1	2	3	4	5	
07*	ANTIBIOTIC (CIPROFLOXACIN C		IN)	1	2	3	4	5	
08*	PARACETAMOL TABLETS								
09*	IRON + FOLIC ACID TABLETS			1	2	3	4	5	

# **SECTION 14: ANTENATAL CARE**

1400	CHECK Q.102.05	ANC SERVICES NOT					
				AVAILABL	E IN FACI		
		N	EXT SEC	TION OR S	SERVICE	SITE 🚽	
	ASK TO BE SHOWN THE LOCATION IN THE FACILITY WI FIND THE PERSON MOST KNOWLEDGEABLE ABOUT INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF TH	T ANTEN	ATAL CAF	RE SERVIC	ES IN TH	IE FACILITY.	
1401	How many days in a month are antenatal care services offered at this facility?	NUM	BER OF DA	YS/MONTH			
	USE A 4-WEEK MONTH TO CALCULATE # OF DAYS						
1402	Do ANC providers provide any of the following services to pregnant w part of routine ANC?	omen as YES NO					
01	IRON SUPPLEMENTATION				1	2	
02	FOLIC ACID SUPPLEMENTATION				1	2	
03	INTERMITTENT PREVENTIVE TREATMENT (IPT) FOR MALARIA				1	2	
04	TETANUS TOXOID VACCINATION				1	2	
05*	PROVIDE MISOPROSTOL TABLET/CAPSULE FOR HOME-BASED	DELIVERI	ES		1	2	
06*	PROVIDE VITAMIN A WHITHIN 42 DAYS OF DELIVEY				1	2	
1403	CHECK Q1402.04 TT VACCINATION PROVIDED				VACCINA		1406
1404	Is tetanus toxoid vaccination available on all days that ANC services are available in this facility?						→ 1406
1405	How many days each week are tetanus toxoid vaccinations available at this facility?			K			
1406	Do ANC providers in this facility provide any of the following <b>tests</b> from this site to pregnant women as	• •	SERVED LABLE		(B) NC	T OBSERVED	
	part of ANC? IF YES, ASK TO SEE THE TEST KIT OR EQUIPMENT. IF TEST NOT DONE IN ANC, PROBE TO DETERMINE IF THE TEST IS DONE ELSEWHERE IN THE FACILITY	AT LEAST ONE VALID	AVAILABL E NONE VALID	REPORETEI AVAILABLE NOT SEEN	AVAILAB		AVAILABLE ELSEWHERE IN FACILITY
	CHECK TO SEE IF AT LEAST ONE TEST KIT OF EACH TEST IS VALID/UNEXPIRED						
02	URINE PROTEIN TEST	1	2	3	4	5	6
03	URINE GLUCOSE TEST	1	2	3	4	5	6
04	ANY RAPID TEST FOR HEMOGLOBIN	1	2	3	4	5	6
05	SYPHILIS RAPID DIAGNOSTIC TEST	1	2	3	4	5	6

1408	Do ANC providers in this facility routinely diagnose and treat RTIs / STIs, or are RTI/STI clients referred to another provider or location for diagnosis and treatment?	ROUTINELY DIAGNOSE AND TREAT STIS
1409	Do you have the <b>national ANC guidelines</b> available in this service area today?	YES 1 NO 2 → 1411
1410	May I see the national ANC guidelines? ACCEPTABLE IF PART OF OTHER GUIDELINES	OBSERVED 1 → 1415 REPORTED NOT SEEN 2
1411	Do you have <b>any other ANC guidelines</b> available in this service area today?	YES 1 NO 2 → 1415
1412	May I see the other guidelines?	OBSERVED 1 REPORTED NOT SEEN 2
1415	Do you have visual aids for client education on subjects related to pregnancy or antenatal care available in this service area today?	YES 1 NO 2 → 1417
1416	May I see the visual aids for client education?	OBSERVED 1 REPORTED NOT SEEN 2
1417	Are individual client cards or records for ANC and PNC clients maintained at this service site?	YES 1 NO
1418	May I see a blank copy of the client records or cards?	OBSERVED 1 REPORTED NOT SEEN 2
1419	Does this facility have a system whereby observation or parameters for ANC clients are routinely carried out before the consultation?	YES 1 NO 2 → 1421
	IF YES, ASK TO SEE THE PLACE WHERE THESE ACTIVITIES TAKE PLACE.	

1420	OBSERVE IF THE BELOW ACTIVITIES ARE BEING DONE ROUTINELY. IF YOU DO NOT SEE AN ACTIVITY, ASK: Is [ACTIVITY YOU DO NOT SEE] routinely done for all antenatal care clients?	ACTIVITY OBSERVED	ACTIVITY REPORTED NOT SEEN	ACTIVITY NOT ROUTINELY DONE	DON'T KNOW
01	Weighing of clients	1	2	3	8
02	Taking blood pressure	1	2	3	8
03	Conducting group health education sessions	1	2	3	8
04	Urine test for protein	1	2	3	8
05	Blood test for anemia	1	2	3	8
08	Measuring client's height	1	2	3	8
09*	Ultrasonography	1	2	3	8

#### EQUIPMENT AND SUPPLIES FOR ROUTINE ANC

1421	I would like to know if the		(A) AVA	ILABLE			(B	B) FUNCTIONING		
1721	following items are available in this service area and are functioning.	OBSERVED		RTED SEEN		OT LABLE	YES	NO	DON'T KNOW	
01	DIGITAL BP APPARATUS	1 <b>→</b> b	2	→ b	3 02	-	1	2	8	
02	MANUAL BP APPARATUS	1 <b>→</b> b	2	→ b	3 03		1	2	8	
03	STETHOSCOPE	1 <b>→</b> b	2	→ b	3 04		1	2	8	
04	EXAMINATION LIGHT (FLASHLIGHT OK)	1 <b>→</b> b	2	→ b	3 05	•	1	2	8	
05	FETAL STETHOSCOPE/PINNARD	1 <b>→</b> b	2	→ b	3 06	•	1	2	8	
06	ADULT WEIGHING SCALE	1 <b>→</b> b	2	→ b	3 07	-	1	2	8	
07	EXAMINATION BED OR COUCH	1	2		3					
08	TAPE MEASURE FOR FUNDAL HEIGHT	1	2		3					
1422	Please tell me if any of the following medicin are available at this services site today.	nes		(A) OBSERVED AVAILABLE		(B) NOT OBSERVED				
	I would like to see them. CHECK TO SEE IF AT LEAST ONE IS VAI (NOT EXPIRED)	_ID			EAST VALID		REPORTED LE AVAILABLE LID NOT SEEN	AVAILABLE	NO, OR NEVER AVAILABLE	
01	IRON TABLETS (INDIVIDUAL TABLETS)				1	2	3	4	5	
02	FOLIC ACID TABLETS (INDIVIDUAL TABL	ETS)			1	2	3	4	5	
03	COMBINED IRON AND FOLIC ACID TABL	ETS			1	2	3	4	5	
05	TETANUS TOXOID VACCINE				1	2	3	4	5	
07*	MISOPROSTOL TABLET/CAPSULE				1	2	3	4	5	
08*	VITAMIN A (MATERNAL)				1	2	3	4	5	

1450	ASSESS THE ROOM OR AREA FOR THE ITEMS LISTED BELOW. FOR ITEMS THAT YOU DO NOT SEE, ASK YOUR RESPONDENT TO SHOW THEM TO YOU. IF THE SAME ROOM OR AREA HAS ALREADY BEEN ASSESSED, INDICATE WHERE THE DATA ARE RECORDED	CHILD VACC CHILD CURA FAMILY PLAI DELIVERY [C TUBERCULC NCD [Q2351]	NFORMATION [0 CINATION [Q105 ATIVE CARE [Q <sup>2</sup> NNING [Q1351]. Q1651]. DSIS [Q1951]. J. DUSLY SEEN.	NEXT SECTION / SERVICE 5		
1451	STANDARD PRECAUTIONS AND CONDITIONS FOR CLIENT EXAMINATION		OBSERVED	REPORTED, NOT SEEN	NOT AVAILABLE	
01	RUNNING WATER (PIPED, BUCKET WITH TAP OR POUR PITCHER)		1	2	3	
02	HAND-WASHING SOAP (MAY BE LIQUID SOAP)		1	2	3	
03	ALCOHOL-BASED HAND RUB		1	2	3	
04	WASTE RECEPTACLE (PEDAL BIN) WITH LID AND PLASTIC BIN LINER			2	3	
05	OTHER WASTE RECEPTACLE		1	2	3	
06	SHARPS CONTAINER ("SAFETY BOX")		1	2	3	
07	DISPOSABLE LATEX GLOVES		1	2	3	
08	DISINFECTANT/ANTISEPTICS [E.G., CHLORINE, HIBITANE, ALCOHO	DL]	1	2	3	
09	SINGLE-USE STANDARD DISPOSABLE SYRINGES WITH NEEDLES AUTO-DISABLE SYRINGES WITH NEEDLES	OR	1	2	3	
10	MEDICAL MASKS		1	2	3	
11	GOWNS		1	2	3	
12	EYE PROTECTION [GOGGLES OR FACE PROTECTION]		1	2	3	
13	GUIDELINES FOR STANDARD PRECAUTIONS		1	2	3	
1452	DESCRIBE THE SETTING OF THE ANC SERVICE ROOM OR AREA.	THE ANC SERVICE       PRIVATE ROOM				

# SECTION 16: DELIVERY AND NEWBORN CARE

1600	CHECK Q102.07 NORMAL DELIVERY AVAILABLE	NORMAL DELIVERY NOT AVAILABLE	
	ASK TO BE SHOWN THE LOCATION IN THE FACILITY FIND THE PERSON MOST KNOWLEDGEABLE INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF	ABOUT DELIVERY SERVICES IN THE FACILITY.	
1601	Is a person skilled in conducting deliveries present at the facility today or on call at all times (24 hours a day), including weekends, to provide care? Specifically, I am referring to medical specialists, medical officers, nurses, and family welfare assistants.	YES	→ 1604
1602	Is there a duty schedule or call list for 24-hr staff assignment?	YES	→ 1604
1603	May I see the duty schedule or call list for 24-HR staff assignment?	OBSERVED	

#### SIGNAL FUNCTIONS

1604	Please tell me if any of the following	(A) EVER	PROVIDED IN F	ACILITY	(B) PROVIDE	D IN PAST 3 M	ONTHS
	interventions have ever been carried out by providers as part of their work in this facility, and if so, whether the intervention has been carried out at least once during the past 3 months.	YES	NO	DK	YES	NO	DK
01	PARENTERAL ADMINISTRATION OF ANTIBIOTICS (IV OR IM)	1 → b	2 02◀	8 02	1	2	8
02	PARENTERAL ADMINISTRATION OF OXYTOCIC (IV OR IM)	1 → b	2 03◀	8 03	1	2	8
03	PARENTERAL ADMINISTRATION OF ANTICONVULSANT FOR HYPERTENSIVE DISORDERS OF PREGNANCY (IV OR IM)	1 → b	2 04 <b>↓</b>	8 04	1	2	8
04	ASSISTED VAGINAL DELIVERY	1 → b	2 05◀	8 05◀	1	2	8
05	MANUAL REMOVAL OF PLACENTA	1 → b	2 06◀	8 06	1	2	8
06	REMOVAL OF RETAINED PRODUCTS OF CONCEPTAION	1 → b	2 07◀	8 07	1	2	8
07	NEONATAL RESUSCITATION	1 → b	2 08◀	8 08◀	1	2	8
08	CORTICOSTEROIDS FOR PRE-TERM LABOR NOTE: THIS IS NOT A SIGNAL FUNCTION	1 → b	2 1605	8 1605	1	2	8
1605	Do you have the national guidelines for BEmONC available in this service site?		-				→ 1607
1606	May I see the guidelines for BEmONC ?				N		
1607	Do you have the national guidelines for CEmOC? ACCEPTABLE IF PART OF ANOTHER GUIDELINE.		-	YES 1 NO 2			
1608	May I see the national guidelines for CEmOC?				N		

1609	Do you have guidelines or protocols on management of pre-term labor?	YES 1 NO 2 → 1611
	ACCEPTABLE IF PART OF ANOTHER GUIDELINE.	
1610	May I see the guidelines or protocols on management of pre-term labor?	OBSERVED.         1           REPORTED NOT SEEN.         2
1611	Does this facility practice Kangaroo Mother Care for low birth weight babies?	YES
1612	Is there a separate room or space for Kangaroo Mother Care or is it integrated into the main postnatal ward?	YES, SEPARATE ROOM 1 YES, INTEGRATED 2
1613	Do providers of delivery services in this facility use partograph to monitor labor and delivery?	YES
1614	Are partographs used routinely (for all cases) or selectively (only for some cases) to monitor labor and delivery in this facility?	ROUTINELY 1 SELECTIVELY 2
1615	How many dedicated maternity beds are available in this facility?	# OF DEDICATED MATERNITY BEDS DON'T KNOW
1616	How many dedicated delivery beds are available in this facility?	# OF DEDICATED DELIVERY BEDS
		DON'T KNOW
1617	Does the facility conduct regular reviews of maternal or newborn deaths or "near-misses"?	YES 1 NO, DOES NOT PARTICIPATE
1618	Are reviews done for mothers only, newborns only, or for both mothers and newborns?	FOR MOTHERS ONLY
1619	How often are reviews of <u>maternal deaths</u> or <u>"near misses"</u> carried out?	EVERY: WEEKS
		ONLY WHEN CASE OCCURS
1620	CHECK Q1618:	
	RESPONSE "3"	RESPONSE "3" NOT CIRCLED 1622
1621	How often are reviews of <u>newborn deaths</u> or <u>"near misses"</u> carried out?	EVERY: WEEKS
		ONLY WHEN CASE OCCURS.53ALWAYS WITH MATERNAL REVIEWS.95DON'T KNOW.98

	EQUIPMENT AI	ND SUPP	LIES FOR	ROUTIN	IE DELI	VERIES	
1622	I would like to know if the following items are available		(A) AVAILABLE			(B) FUNCTIONII	NG
	in this delivery area and are functioning.	OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW
01	INCUBATOR	1 <b>→</b> b	2 🍑 b	3	1	2	8
02	OTHER EXTERNAL HEAT SOURCE	1 → b	2 → b	3	1	2	8
03	EXAMINATION LIGHT (FLASHLIGHT OK)	1 <b>→</b> b	2 → b	3	1	2	8
04	SUCTION APPARATUS WITH CATHETER	1 <b>→</b> b	2 → b	3	1	2	8
05	SUCTION BULB OR PENGUIN SUCKER	1 <b>→</b> b	2 → b	3	1	2	8
06	MANUAL VACUUM EXTRACTOR (FOR VACUUM-ASSISTED DELIVER)	1 →b Y)	2 → b	3	1	2	8
07	VACUUM ASPIRATION KIT OR D&C KIT	1 <b>→</b> b	2 → b	3	1	2	8
08	NEWBORN BAG & MASK (AMBU BAG & MASK)	1 → b	2 → b	3	1	2	8
09	THERMOMETER	1 → b	2 → b	3	1	2	8
10	THERMOMETER FOR LOW-BODY TEMPERATURE	1 <b>→</b> b	2 → b	3	1	2	8
11	INFANT SCALE	1 <b>→</b> b	2 → b	3	1	2	8
12	FETAL STETHOSCOPE	1 →b	2 → b	3	1	2	8
13	DIGITAL BLOOD PRESSURE APPARATUS	1 <b>→</b> b	2 → b	3	1	2	8
14	MANUAL BLOOD PRESSURE MACHINE	1 <b>→</b> b	2 🛶 b	3	1	2	8
15	STETHOSCOPE	1 <b>→</b> b	2 → b	3 _ 1623 ◀	1	2	8
1623	Do you have any of the following items	? If yes, I would like	to see them		OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE
01*	DELIVERY BED COMPLETE WITH R	ODS AND STIRRU	PS		1	2	3
02	DELIVERY PACK				1	2	3
03	CORD CLAMP				1	2	3
04	SPECULUM				1	2	3
05	EPISIOTOMY SCISSORS				1	2	3
06	SCISSORS OR BLADE TO CUT COR	D			1	2	3
07	SUTURE MATERIAL WITH NEEDLE				1	2	3
08	NEEDLE HOLDER				1	2	3
09	FORCEPS (LARGE)				1	2	3
10	FORCEPS (MEDIUM)				1	2	3
11	SPONGE HOLDER				1	2	3
12	BLANK PARTOGRAPH				1	2	3
13*	STAIRS (FOR CLIMBING ONTO DEL	VERY BED)			1	2	3

1624	Does this facility <u>routinely</u> observe any of the following postpartum or newborns related practices?		YES	NO		DON'T ł	KNOW
01	Delivery to the abdomen (Skin to Skin)		1	2		8	
02	Drying and wrapping newborns to keep them warm		1	2		8	
03	Initiation of breastfeeding within the first hour			2		8	
04	Routine, complete (head-to-toe) examination of newborn before discharge		1	2		8	
05	Suction of the newborn by means of catheter		1	2		8	
06	Suction of the newborn by means of suction bulb or penguin sucker		1	2		8	
07	Weigh the newborn immediately		1	2		8	
08	Administer Vitamin K to newborn		1	2		8	
09*	Apply Tetracycline or Gentamycin eye ointment to both eyes		1	2		8	
10	Give full bath (immerse newborn in water) shortly (i.e., within a few minutes/hours) after birth			2		8	
11	Give the newborn prelacteal liquids			2		8	
12	Give the newborn OPV (oral polio vaccine/ polio zero vaccine) prior to discharge			2		8	
13	Give the newborn BCG prior to discharge		1	2		8	
14*	Provide maternal Vitamin A		1	2		8	
1625	Please tell me if any of the following medicines or items are available at this service site today.		SERVED LABLE	,	(B) NOT OBSERVED		
	I would like to see them. CHECK TO SEE IF AT LEAST ONE IS VALID (NOT EXPIRED)		AVAILABLE NONE VALID	REPORTED AVAILABLE NOT SEEN	NOT AVAILAI TODAY	BLE NE	), OR VER ILABLE
01	TETRACYCLINE EYE OINTMENT FOR NEWBORN	1	2	3	4	5	
02	INJECTABLE ANTIBIOTIC (E.G., CEFTRIAXONE)	1	2	3	4	5	
03	INJECTABLE UTEROTONIC (E.G., OXYTOCIN)	1	2	3	4	5	
04	MAGNESIUM SULPHATE	1	2	3	4	5	
05	INJECTABLE DIAZEPAM	1	2	3	4	5	
06	IV SOLUTION (RINGER LACTATE) WITH INFUSION SET	1	2	3	4	5	
07	SKIN DISINFECTANT (OTHER THAN CHLORHEXIDINE)	1	2	3	4	5	
08*	7.1% CHLORHEXIDINE SOLUTION (UMBILICAL CORD CLEANSING)	1	2	3	4	5	
09	HYDRALAZINE INJECTION	1	2	3	4	5	
10*	GENTAMYCIN EYE OINTMENT	1	2	3	4	5	

1650	ASSESS THE ROOM OR AREA FOR THE ITEMS LISTED BELOW. FOR ITEMS THAT YOU DO NOT SEE, ASK YOUR RESPONDENT TO SHOW THEM TO YOU. IF THE SAME ROOM OR AREA HAS ALREADY BEEN ASSESSED, INDICATE WHERE THE DATA ARE RECORDED	GENERAL INFORMATION [Q710].       11         CHILD VACCINATION [Q1051]       12         CHILD CURATIVE CARE [Q1251]       13         FAMILY PLANNING [Q1351]       14         ANTENATAL CARE [Q1451]       15         TUBERCULOSIS [Q1951]       19         NCD [Q2351]       22         NOT PREVIOUSLY SEEN       31			NEXT SECTION / SERVICE	
1651	STANDARD PRECAUTIONS AND CONDITIONS FOR CLIENT EXAMINATION			REPORTED, NOT SEEN	NOT AVAILABLE	
01	RUNNING WATER (PIPED, BUCKET WITH TAP OR POUR PITCHER)		1	2	3	
02	HAND-WASHING SOAP (MAY BE LIQUID SOAP)		1	2	3	
03	ALCOHOL-BASED HAND RUB		1	2	3	
04	WASTE RECEPTACLE (PEDAL BIN) WITH LID AND PLASTIC BIN LINER			2	3	
05	OTHER WASTE RECEPTACLE			2	3	
06	SHARPS CONTAINER ("SAFETY BOX")		1	2	3	
07	DISPOSABLE LATEX GLOVES		1	2	3	
08	DISINFECTANT/ANTISEPTICS [E.G., CHLORINE, HIBITANE, ALCOHO	L]	1	2	3	
09	SINGLE-USE STANDARD DISPOSABLE SYRINGES WITH NEEDLES C AUTO-DISABLE SYRINGES WITH NEEDLES	)R	1	2	3	
10	MEDICAL MASKS		1	2	3	
11	GOWNS		1	2	3	
12	EYE PROTECTION [GOGGLES OR FACE PROTECTION]		1	2	3	
13	GUIDELINES FOR STANDARD PRECAUTIONS		1	2	3	
1652	DESCRIBE THE SETTING OF THE DELIVERY SERVICE ROOM OR AREA. PRIVATE ROOM					
	THANK YOUR RESPONDENT AND MOVE TO YOUR NEXT DATA COLLECTION POINT IF DIFFERENT FROM					

CURRENT LOCATION.

# **SECTION 19: TUBERCULOSIS**

1900	CHECK Q102.10 TB SERVICES OFFERED IN FACILITY	NO TB SERVICES				
	ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE TB SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT PROVISION OF TB SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.					
1901	How many days in a month are tuberculosis services offered at this facility? USE A 4-WEEK MONTH TO CALCULATE # OF DAYS	NUMBER OF DAYS / MONTH				

### **TB DIAGNOSIS**

1902	Do providers in this facility make diagnosis that a client has tuberculosis?	YES1 NO2	→ 1904
1903	What is the most common method used by providers in this facility for diagnosing TB? PROBE TO DETERMINE METHOD USED.	SPUTUM SMEAR ONLY.1X-RAY ONLY.2EITHER SPUTUM OR X-RAY.3BOTH SPUTUM AND X-RAY.4CLINICAL SYMPTOMS ONLY.5	
1904	Do providers in this facility ever refer clients outside this facility for TB diagnosis?	YES1 NO2	→ 1908
1905	Does this facility have an agreement with a referral site for TB test results to be returned to the facility either directly or through the client?	YES1 NO2	
1906	Is there a record/register of clients who are referred for TB diagnosis?	YES	→ 1908
1907	May I see the records or register of clients referred for TB testing? CHECK THE RECORDS TO SEE TB DIAGNOSIS RESULTS ARE RECORDED	REGISTER SEEN (PAPER)       1         REGISTER SEEN (ELECTRONIC)       2         REGISTER REPORTED, NOT SEEN       3	

### TB TREATMENT

1908	Do providers in this facility prescribe treatment for TB or manage patients who are on TB treatment?	YES	→ 1910
1909	What treatment regimen or approach is followed by providers in this facility for <u>newly diagnosed TB</u> ? i.e., for new patients, not for retreatment? PROBE TO ARRIVE AT CORRECT RESPONSE	2M INTENSIVE PHASE, 4M CONTINUATION PHASE1         6M INTENSIVE PHASE	
1910	CHECK Q1902 AND Q1908 TB DIAGNOSIS OR TREATMENT IN FACILITY	NO TB DIAGNOSIS OR TREATMENT IN FACILITY NEXT SECTION OR SERVICE SITE	
1911	Does this facility have a system for testing TB patients for HIV infection?	YES	→ 1913
1912	May I see the system, or evidence of such a system? THE SYSTEM MAY BE IN THE FORM OF A REGISTER	SYSTEM OR REGISTER OBSERVED 1 SYSTEM OR REGISTER REPORTED, NOT SEEN 2	

1913	Is HIV rapid diagnostic testing available from this service site?	YES1 NO2 → 1915
1914	May I see a sample HIV rapid diagnostic test (RDT) kit? CHECK TO SEE IF AT LEAST ONE IS VALID	OBSERVED, AT LEAST 1 VALID
1915	Do you have the <b>national guidelines</b> for the diagnosis and treatment of TB available in this service area?	YES1 NO2 → 1917
1916	May I see the national guidelines?	OBSERVED
1917	Do you have any guidelines for the management of HIV and TB co-infection available in this service area?	YES1 NO2 → 1919
	THIS MAY BE PART OF OTHER GUIDELINE	
1918	May I see the guidelines for the management of HIV and TB co-infection?	OBSERVED
1919	Do you have any guidelines related to MDR-TB treatment available in this service area?	YES1 NO2 → 1921
	THIS MAY BE PART OF OTHER GUIDELINE	
1920	May I see the guidelines on treatment of MDR-TB?	OBSERVED
1921	CHECK Q1903 RESPONSES 1, 3 OR 4 CIRCLED	RESPONSES 1, 3 OR 4 NOT CIRCLED 1950
1922	Do you maintain any sputum containers at this service site for collecting sputum specimen?	YES1 NO2 → 1950
1923	May I see a sputum container?	OBSERVED

1950	ASSESS THE TB ROOM OR AREA FOR THE ITEMS . LISTED BELOW. FOR ITEMS THAT YOU DO NOT SEE, ASK YOUR RESPONDENT TO SHOW THEM TO YOU. IF THE SAME ROOM OR AREA HAS ALREADY BEEN ASSESSED, INDICATE WHERE THE DATA ARE RECORDED	GENERAL INFORMATION [Q710].       11         CHILD VACCINATION [Q1051]       12         CHILD CURATIVE CARE [Q1251].       13         FAMILY PLANNING [Q1351].       14         ANTENATAL CARE [Q1451].       15         DELIVERY SERVICES [Q1651].       17         NCD [Q2351].       22         NOT PREVIOUSLY SEEN.       31			12 13 14 15 17 22 →1953
1951	STANDARD PRECAUTIONS AND CONDITIONS FOR CLIENT EXAMINATION		OBSERVED	REPORTED, NOT SEEN	NOT AVAILABLE
01	RUNNING WATER (PIPED, BUCKET WITH TAP OR POUR PITCH	IER)	1	2	3
02	HAND-WASHING SOAP (MAY BE LIQUID SOAP)		1	2	3
03	ALCOHOL-BASED HAND RUB		1	2	3
04	WASTE RECEPTACLE (PEDAL BIN) WITH LID AND PLASTIC BI LINER.	1 _ 06◄	2	3	
05	OTHER WASTE RECEPTACLE		1	2	3
06	SHARPS CONTAINER ("SAFETY BOX")		1	2	3
07	DISPOSABLE LATEX GLOVES		1	2	3
08	DISINFECTANT/ANTISEPTICS [E.G., CHLORINE, HIBITANE, ALC	OHOL]	1	2	3
09	SINGLE USE STANDARD DISPOSABLE SYRINGES WITH NEED AUTO-DISABLE SYRINGES WITH NEEDLES	LES, OR	1	2	3
10	MEDICAL MASKS		1	2	3
11	GOWNS		1	2	3
12	EYE PROTECTION [GOGGLES OR FACE PROTECTION]		1	2	3
13	GUIDELINES FOR STANDARD PRECAUTIONS		1	2	3
1952	DESCRIBE THE SETTING OF THE ROOM OR AREA       PRIVATE ROOM			2	
1953	53 CHECK Q214 TB MEDICINES STORED IN TB TB MEDIS STORED IN THE LOCATION OR NOT STOCKED (RESPONSE 1 NOT CIRCLED) (RESPONSE				
	THANK YOUR RESPONDENT AND MOVE TO YOUR NEXT DATA COLLECTION POINT IF DIFFERENT FROM CURRENT LOCATION.				

## **SECTION 23: NON-COMMUNICABLE DISEASES**

2300

CHECK Q102.14 CHRONI

CHRONIC DISEASE SERVICES AVAILABLE FROM FACILITY  $\square$ 

CHRONIC DISEASE SERVICES NOT

NEXT SECTION OR SERVICE SITE <

ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE CLIENTS WITH NON-COMMUNICABLE OR CHRONIC CONDITIONS SUCH AS DIABETES AND CARDIOVASCULAR DISEASES ARE SEEN. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT PROVISION OF SUCH SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.

# DIABETES

2301	Do providers in this facility diagnose and/or manage diabetes.	YES, DIAGNOSE ONLY.       1         YES, TREAT ONLY.       2         YES, DIAGNOSE AND TREAT.       3         NO       4         → 2310
2302	Do you have the <b>national guidelines</b> for the diagnosis and management of diabetes available in this service area?	$\begin{array}{c} \text{YES.} & 1 \\ \text{NO.} & 2 \end{array} \xrightarrow{1} 2304 \end{array}$
2303	May I see the national guidelines?	OBSERVED
2304	Do you have <b>any other guidelines</b> for the diagnosis and management of diabetes available in this service area?	$\begin{array}{c} \text{YES.} & 1 \\ \text{NO.} & 2 \end{array} \rightarrow 2310 \end{array}$
2305	May I see the other guidelines?	OBSERVED

## CARDIO-VASCULAR DISEASES

2310	Do providers in this facility diagnose and/or manage <b>cardiovascular diseases</b> such as hypertension in patients?	YES, DIAGNOSE ONLY.       1         YES, TREAT ONLY.       2         YES, DIAGNOSE AND TREAT.       3         NO       4	· 2330
2311	Do you have <b>the national guidelines</b> for the diagnosis and management of cardio-vascular diseases available in this service area?	YES	2313
2312	May I see the national guidelines for the diagnosis and management of cardio-vascular diseases?	OBSERVED1 REPORTED, NOT SEEN2	2330
2313	Do you have <b>any other guidelines</b> for the diagnosis and management of cardio-vascular diseases available in this service area?	YES1 NO2 →	2330
2314	May I see the other guidelines?	OBSERVED	

#### BASIC SUPPLIES AND EQUIPMENT

2330	ASSESS THE ROOM OR AREA FOR THE BASIC SUPPLIES AND EQUIPMENT LISTED BELOW. IF THE SAME ROOM OR AREA HAS ALREADY BEEN	GENERAL INFORMATION SECTION (Q700)1 NOT PREVIOUSLY SEEN2					
	ASSESSED, INDICATE WHERE THE DATA ARE RECORDED						
2331	I would like to know if the following items are available today in the main service area and are functioning	(	A) AVAILABLE		(E	B) FUNCTIO	)NING
	ASK TO SEE ITEMS.	OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW
01	ADULT WEIGHING SCALE	1 → b	2→ b	3 02◀	1	2	8
02	CHILD WEIGHING SCALE [250 GRAM GRADATION]	1> b	2→ b	3 03◀	1	2	8
03	INFANT WEIGHING SCALE [100 GRAM GRADATION]	1 → b	2→ b	3 04◀	1	2	8
04	STADIOMETER [OR HEIGHT ROD] FOR MEASURING HEIGHT	1 → b	2→ b	3 05◀	1	2	8
05	MEASURING TAPE [FOR CIRCUMFERENCE]	1	2	3			
06	THERMOMETER	1 → b	2→ b	3 07◀	1	2	8
07	STETHOSCOPE	1> b	2→ b	3 08◀	1	2	8
08	DIGITAL BP APPARATUS	1> b	2→ b	3 09◀	1	2	8
09	MANUAL BP APPARATUS	1 → b	2→ b	3 10◀	1	2	8
10	LIGHT SOURCE (FLASHLIGHT ACCPTABLE)	1 → b	2→ b	3 11 ◀	1	2	8
11	SELF-INFLATING BAG AND MASK [ADULT]	1> b	2→ b	3 12◀	1	2	8
12	SELF-INFLATING BAG AND MASK [PEDIATRIC]	1 → b	2→ b	3 13◀	1	2	8
13	MICRONEBULIZER	1 → b	2→ b	3 – 14 <b>↓</b>	1	2	8
14	SPACERS FOR INHALERS	1	2	3			
15	PEAK FLOW METERS	1 → b	2→ b	3 16◀	1	2	8
16	PULSE OXIMETER	1 → b	2 → b	3 17◀	1	2	8
17	OXYGEN CONCENTRATORS	1 → b	2→ b	3 –	1	2	8
18	FILLED OXYGEN CYLINDER	1 → b	2 → b	18 <del>∢</del> ]	1	2	8
19	OXYGEN DISTRIBUTION SYSTEM	1 → b	2 → b	19 <b>√</b> 3 ⊣	1	2	8
			-	20 ◀			
20	INTRAVENOUS INFUSION KITS - ADULT	1	2	3			
21	INTRAVENOUS INFUSION KITS - PEDIATRIC	1	2	3			

#### CLIENT EXAMINATION ROOM

2350	ASSESS THE ROOM OR AREA FOR THE ITEMS LISTED BELOW. FOR ITEMS THAT YOU DO NOT SEE, ASK YOUR RESPONDENT TO SHOW THEM TO YOU. IF THE SAME ROOM OR AREA HAS ALREADY BEEN ASSESSED, INDICATE WHERE THE DATA ARE RECORDED	GENERAL INFORMATION [Q710]. CHILD VACCINATION [Q1051] . CHILD CURATIVE CARE [Q1251] . FAMILY PLANNING [Q1351]. ANTENATAL CARE [Q1451]. DELIVERY SERVICES [Q1651]. TUBERCULOSIS [Q1951]. NOT PREVIOUSLY SEEN.				NEXT SECTION / SERVICE	
2351	STANDARD PRECAUTIONS AND CONDITIONS FOR CLIENT EXAMINATION		OBSERVED	REPORTED, NOT SEEN	NOT AVAILABI	_E	
01	RUNNING WATER (PIPED, BUCKET WITH TAP OR POUR PITCHER)		1	2	3		
02	HAND-WASHING SOAP (MAY BE LIQUID SOAP)		1	2	3		
03	ALCOHOL-BASED HAND RUB		1	2	3		
04	WASTE RECEPTACLE (PEDAL BIN) WITH LID AND PLASTIC BIN LINER		1 06◀	2	3		
05	OTHER WASTE RECEPTACLE		1	2	3		
06	SHARPS CONTAINER ("SAFETY BOX")		1	2	3		
07	DISPOSABLE LATEX GLOVES		1	2	3		
08	DISINFECTANT/ANTISEPTICS [E.G., CHLORINE, HIBITANE, ALC	COHOL]	1	2	3		
09	SINGLE USE STANDARD DISPOSABLE SYRINGS WITH NEEDL OR AUTO-DISABLE SYRINGES WITH NEEDLES	ES,	1	2	3		
10	MEDICAL MASKS		1	2	3		
11	GOWNS		1	2	3		
12	EYE PROTECTION [GOGGLES OR FACE PROTECTION]		1	2	3		
13	GUIDELINES FOR STANDARD PRECAUTIONS		1	2	3		
2352	DESCRIBE THE SETTING OF THE ROOM OR       PRIVATE ROOM.       1         SERVICE AREA       OTHER ROOM WITH       1         AUDITORY AND VISUAL PRIVACY.       2         VISUAL PRIVACY ONLY.       3         NO PRIVACY.       4						
	THANK YOUR RESPONDENT AND MOVE TO YOUR NEXT DATA COLLECTION POINT IF DIFFERENT FROM CURRENT LOCATION.						

## **SECTION 25: CESAREAN DELIVERY**

2500	CHECK Q102.16	CESAREAN SE DONE IN FA		CES	AREAN DELIVE DONE IN F			
			ł	NEXT SECT	ION OR SERV	ICE SITE 🔶		
		KNOWLEDGEA	BLE ABOUT PRO	VHERE CESAREAN DELIVER DVISION OF SUCH SERVICE SURVEY AND ASK THE FOLI	S IN THE FACI	LITY.		
2501	Does the facility have a health worker of Cesarean delivery (section) present at a day (including weekends and on publ	the facility or on c	all 24 hours	YES NO			→ 2504	
2502		here a duty schedule or call list for 24-hr staff assignment?					b. 0504	
2503	May I see the duty schedule or call list assignment?	for 24-HR staff		24-HOUR DUTY SCHEDU SCHEDULE OBSERVED. SCHEDULE REPORTED,		1	> 2504	
2504	Does this facility have an anesthetist pu hours a day (including weekends and o		-	YES			→ 2507	
2505	Is there a duty schedule or call list?			YES 24-HOUR DUTY SCHEDU		1	→ 2507	
2506	May I see the duty schedule or call list?	)		SCHEDULE OBSERVED. SCHEDULE REPORTED,		1	F 2001	
2507	Have Cesarean deliveries been perforr during the past 3 months?	ned in this facility		YES				
	ASK TO SEE THE ROOM OR AR	EA WHERE CESA	REAN DELIVER	RIES ARE DONE AND ASK TO	O SEE THE ITE	MS BELOW		
2510	Please tell me if the		(A) AVAIL	ABLE	(B)	FUNCTIONIN	G	
	following equipment are available at this site today and is functioning. I would like to see them	OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW	
01	ANESTHESIA MACHINE	$1 \rightarrow b$	2 → b	3	1	2	8	
02	TUBINGS AND CONNECTORS (TO CONNECT ENDOTRACHEAL TUBE)	1 → b	2 → b	3	1	2	8	
03	OROPHARYNGEAL AIRWAY (ADULT)	1 → b	2 🛶 b	3	1	2	8	
04	OROPHARYNGEAL AIRWAY (PEDIATRIC)	1 → b	2 🔶 b	3	1	2	8	
05	MAGILLS FORCEPS - ADULT	1 → b	2 → b	3	1	2	8	
06	MAGILLS FORCEPS - PEDIATRIC	1 → b	2 → b	3	1	2	8	
07	ENDOTRACHEAL TUBE CUFFED SIZES 3.0 - 5.0	1 → b	2 → b	3	1	2	8	
08	ENDOTRACHEAL TUBE CUFFED SIZES 5.5 - 9.0	1 → b	2 → b	3	1	2	8	
09	INTUBATING STYLET	1 → b	2 → b	3	1	2	8	
10	SPINAL NEEDLE	1 → b	2 → b	3	1	2	8	
11*	OR TABLE	1 → b	2 → b	3	1	2	8	
12*	OR LIGHT	1 → b	2 → b	3	1	2	8	
13*	IV STAND	1 → b	2 → b	3	1	2	8	
14*	EMERGENCY POWER SUPPLY	1 → b	2 → b	3	1	2	8	
15*	INSTRUMENT SET FOR CESAREAN DELIVERY	1	2	3				
16*	AIR CONDITIONER	1 → b	2 → b	3	1	2	8	
17*	OXYGEN CYLINDER	1 → b	2 → b	3	1	2	8	
18*	STERILE GLOVES	1	2	3				
19*	DISINFECTANT	1 → b	2 → b NEXT SECTIO	3 ] DN/SERVICE SITE ◄	1	2	8	
	THANK YOUR RESPONDENT AND MOVE TO YOUR NEXT DATA COLLECTION POINT IF DIFFERENT FROM CURRENT LOCATION							

# SECTION 26: BLOOD TYPING AND COMPATIBILITY TESTING

2600	CHECK Q102.18 BLOOD TYPING SERVICES AVAILABLE FROM FACILITY	BLOOD TYPING SERVICES NOT AVAILABLE FROM FACILITY NEXT SECTION OR SERVICE SITE ←				•
2601	Please tell me if any of the following reagents or equipment is available at this services site today.	(A) OBS AVAIL		(B) NOT OBSERVED		
	I would like to see them.	AT LEAST	AVAILABLE	REPORTED AVAILABLE	NOT AVAILABLE	NEVER
	CHECK TO SEE IF AT LEAST ONE IS VALID (NOT EXPIRED)	ONE VALID	NONE VALID		TODAY/DK	AVAILABLE
01	Anti-A Reagent	1	2	3	4	5
02	Anti-B Reagent	1	2	3	4	5
03	Anti-D Reagent	1	2	3	4	5
04	COOMB'S REAGENT	1	2	3	4	5
05	Anti-A,B Reagent	1	2	3	4	5

# SECTION 27: BLOOD TRANSFUSION SERVICES

2700	CHECK Q102.19 BLOOD TRANSFUSION	BLOOD TRANSFUSION NOT					
ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE BLOOD IS COLLECTED, STORED, PROCESSED OR HANDLED PRIOR TO TRANSFUSION. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT PROVISION OF BLOOD TRANSFUSION SERVICES IN THE FACILITY INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.							
2701*	What is the source of the blood that is transfused in this facility? PROBE FOR A COMPLETE LIST OF SOURCES OF BLOOD.	NATIONAL BLOOD BANK.       A         DIVISIONAL BLOOD BANK.       B         RELATIVES DONATING DIRECTLY.       C         RED CRESCENT       D         OTHERX       X         (SPECIFY)       X					
2702	Has blood transfusion been done in this facility in an obstetric context (i.e., for maternal care) during the past 3 months?	YES1 NO2					
SCREENING FOR INFECTIOUS DISEASES							
2710	Is blood that is transfused in this facility screened, either in this facility or externally, for any infectious diseases prior to transfusion?	$\begin{array}{c} \text{YES.} & 1 \\ \text{NO.} & 2 \end{array} \rightarrow 27 \end{array}$					
2711	Is the blood that is transfused screened only in the facility, only at an external facility, or both?	ONLY IN THIS FACILITY1 ONLY AT AN EXTERNAL FACILITY2 BOTH INTERNALLY AND EXTERNALLY3					
2712	Is the blood that is transfused in the facility screened, <u>either in this facility or externally</u> , for any of the following infectious diseases? IF YES, ASK: Is the blood "always", "sometimes", or "rarely" screened?	ALWAYS	SOMETIMES	RARELY	٨	10	
01	HIV	1	2	3		4	
02	SYPHILIS	1	2	3		4	
03	HEPATITIS B	1	2	3		4	
04	HEPATITIS C	1	2	3		4	
05	MALARIA	1	2	3		4	
2713	Do you ever send blood sample outside the facility for screening for any of the tests mentioned above?	YES NO					
2714	For which of the following tests do you send blood sample outside the facility for screening?	(A) SEND SPECIMEN OUT (B) RECORD OF OUTSIDE			F OUTSIDE	TEST	
	ASK TO SEE DOCUMENTATION	YES	NO	YES	NO		
01	HIV	1 b	2 02◀	1	2		
02	SYPHILIS	1 b	2 03◀	1	2		
03	HEPATITIS B	1 b	2 04 ◀	1	2		
04	HEPATITIS C	1 b	2 05◀	1	1 2		
05	MALARIA	1 b	2 2720◀	1	2		

#### **BLOOD STORAGE**

2720	Has the facility run out of blood for more than one day anytime during the past 3 months?	YES1 NO2					
2721	Is there a blood bank fridge or other refrigerator available for blood storage in this service area?	YES1 NO2 → 2724					
2722	May I see the blood bank fridge or other refrigerator?	OBSERVED.         1           REPORTED NOT SEEN.         2           → 2724					
2723	WHAT IS THE TEMPERATURE IN THE BLOOD BANK FRIDGE OR OTHER REFRIGERATOR?	BETWEEN +2 AND +6 DEGREES.       1         ABOVE +6 DEGREES.       2         BELOW +2 DEGREES.       3         THERMOMETER NOT FUNCTIONAL.       4					
2724	Do you have any guidelines on the appropriate use of blood and safe transfusion practices?	YES1 NO2 →2725A					
2725	May I see the guidelines on appropriate use of blood and safe blood transfusion?	OBSERVED					
2725A*	Please tell me if any of the following reagents or equipment is available at this services site today.	(A) OBS AVAIL		(B) NOT OBSERVED			
	I would like to see them. CHECK TO SEE IF AT LEAST ONE IS VALID (NOT EXPIRED)	AT LEAST ONE VALID	AVAILABLE NONE VALID	REPORTED AVAILABLE NOT SEEN	NOT AVAILABLE TODAY/DK	NEVER AVAILABLE	
01	Disposable blood transfusion set	1	2	3	4	5	
02	Blood bags	1	2	3	4	5	

## SECTION 30: GENERAL FACILITY LEVEL CLEANLINESS

3000	ASSESS GENERAL CLEANLINESS / CONDITIONS OF FACILITY		YES	NO	
01	FLOOR: SWEPT, NO OBVIOUS DIRT OR WASTE		1	2	
02	COUNTERS/TABLES/CHAIRS: WIPED CLEAN- NO OBVIOUS DUST OR WASTE		1	2	
03	NEEDLES, SHARPS OUTSIDE SHARPS BOX		1	2	
04	SHARPS BOX OVERFLOWING OR TORN/PIERCED		1	2	
05	BANDAGES/INFECTIOUS WASTE LYING UNCOVERED		1	2	
06	WALLS: SIGNIFICANT DAMAGE		1	2	
07	DOORS: SIGNIFICANT DAMAGE		1	2	
08	CEILING: WATER STAINS OR DAMAGE		1	2	
	INTERVIEW END TIME				
	THANK YOUR RESPONDENT AND MOVE TO YOUR NEXT DATA COLLECTION POINT IF DIFFERENT FROM CURRENT LOCATION.				

#### **INTERVIEWER'S OBSERVATIONS**

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

#### SUPERVISOR'S OBSERVATIONS

NAME OF THE SUPERVISOR: DATE:

# HEALTH PROVIDER INTERVIEW QUESTIONNAIRE
#### 2014 BANGLADESH HEALTH FACILITY SURVEY

#### HEALTH PROVIDER INTERVIEW

Facil	ity Number:											
Prov	ider SERIAL Number:		[FROM ST	AFF LIS	STING F	ORM]						
	ider Sex: (1=MALE; 2=FEMALE) .ssigned; 2=Seconded/Deputed)											
Prov	ider Status:											
Inter	viewer Code:											
Num	ber of ANC Observations Associated with	۱ Provider										
Num	ber of FP Observations Associated with F	Provider										
Num	ber of Sick Child Observations Associate	d with Provider		•••••								
Num	ber of Deliveries Associated with Provide	ı <b>r</b>										
PRE	CATE IF PROVIDER WAS VIOUSLY INTERVIEWED IN THER FACILITY.	YES, P	PREVIOUS	Y INTE	RVIEW	'ED				1		
IF YE	ES, RECORD NAME AND	NAME & NUMBE	R OF FACI	LITY						—	→ E	ND
	HE WAS INTERVIEWED		NO, NOT P	REVIO	USLY II	NTERV	IEWE	D		2		
	THE FOLLOWING CONSENT FORM											
Minist	day! My name is We a try of Health and Family Welfare conducting a survadesh.										and the	I.
Now I	will read a statement explaining the study.											
	acility was selected to participate in this study. We will b training you have received.	e asking you several ques	tions about the	e types of	services	that you	person	ally prov	ride, a	as well as q	uestions	
The in	formation you provide us may be used by NIPORT, the	MOHFW, other organizatic	ons or researcl	ners, for p	lanning s	ervice in	nprover	nents or	furthe	er studies o	services	5.
	r your name nor that of any other health worker respond y of the respondents may be identified later. Still, we ar							ort; howe	ver, tl	here is a sn	nall chan	ce
	ay refuse to answer any question or choose to stop the u have any questions about the study? Do I have your a		ever, we hope	you will c	collaborat	e with the	e study					
						2	0	1				
Intervi	ewer's signature		DAY	Μ	ONTH	YEA	२	-				
SIGNA	TURE OF INTERVIEWER INDICATES INFORMED CO	NSENT WAS PROVIDED.									-	
101	May I begin the interview now?				YES.					1		

#### **1. EDUCATION AND EXPERIENCE**

102	I would like to ask you some questions about your educational background.			
	How many years of education have you completed in total, starting from your primary, secondary and further education?		YEARS	
103	What is your current qualification? For example, Are you a generalist medical doctor or a specialist medical doctor? IN CASE OF NURSE/SACMO/TECHNOLOGISTS/ FP PERSONNELS/NUTRITIONIST , ASK What is your current occuaptional category?	SPECIALIST GENE SPECIALIST OBSTI SPECIALIST PEDIA SPECIALIST PEDIA SPECIALIST PSYCI SPECIALIST ANES ANY OTHER SPEC MEDICAL OFFICER DOCTOR, INCLUDI IMO, MCH/FP, RMC OR TITLE) MEDICAL OFFICER DENTAL SURGEON SACMO / MEDICAL MATRON NURSING SUPERV SENIOR STAFF NU ASSISTANT NURSI FAMILY WELFARE FAMILY WELFARE HEALTH ASSISTAN COMMUNITY HEAL HEALTH INSPECTO ASSISTANT HEALT NUTRITIONIST HEALTH EDUCATO MEDICAL TECHNO MIDWIFE	L         L           CINE [INCLUDING CARDIOLOGY].         01           IRAL SURGERY.         02           ETRICS / GYNECOLOGY.         03           ATRICS.         04           HIATRY.         05           THESIA.         06           IALIST NOT LISTED ABOVE.         07           R (MBBS) (ANY NON-SPECIALIST         08           D, REGARDLESS OF DESIGNATION         08           D, REGARDLESS OF DESIGNATION         08           R - ANESTHETIST.         09           N.         10           ASSISTANT.         11	
		OTHER		
104	What year did you graduate (or complete) with this qualification? IF NO TECHNICAL QUALIFICATION ASK: What year did you complete any basic training for your current occupational category?		YEAR	
105	In what year did you start working in this facility? YOU MAY PROBE BY ASKING "HOW LONG HAVE YOU WORKED IN	THIS FACILITY"?	YEAR	
108	Are you a manager or in-charge for any clinical services?		YES 1 NO 2	

# 2. GENERAL TRAINING / MALARIA / NON-COMMUNICABLE DISEASES

200	I will like to ask you a few questions about in-service training you have received related to your work. In-service training refers to training you have received related to your work since you started working. I will start with some general topics. Note that the training topics I will mention may have been covered as stand alone trainings, or they may have been covered under another training topic.			
	Have you received any in-service training, training updates or refresher training in any of the following topics [READ TOPIC]	YES,	YES,	NO
	IF YES, ASK: Was the <i>training, training update or refresher training</i> within the past 24 months or more than 24 months ago?	WITHIN PAST 24 MONTHS	OVER 24 MONTHS AGO	IN-SERVICE TRAINING OR UPDATES
01	Standard precautions, including hand hygiene, cleaning and disinfection, waste management, needle stick and sharp injury prevention?	1	2	3
02	Any specific training related to injection safety practices or safe injection practices?	1	2	3
03	Health Management Information Systems (HMIS) or reporting requirements for any service?	1	2	3
04	Confidentiality and rights to non-discrimination practices for people living with HIV/AIDS	1	2	3

201	CHECK Q103 FOR PROVIDER OCCUPATIONAL CATEGORY / QUALIFICATION						
	CODE 25 (MEDICAL TECHNOLOGIST LABORATORY) CIRCLED		→ 700				
	CODE 25 (MEDICAL TECHNOLOGIST LABORATORY) NOT CIRCLED						
I will now ask you a few questions about services you personally provide in your current position in this facility and any in-service training, training updates or refresher trainings you may have received related to that service. Please remember we are talking about services you provide in your current position in this facility. The training topics I will mention may have been covered as a stand-alone training, or covered as part of another training topic.							
202	In your <b>current</b> position, and as a part of your work for this facility, do you personally provide any services that are designed to be <b>youth or adolescent friendly?</b> i.e., designed with the specific aim to encourage youth or adolescent utilization?	YES 1 NO 2					
203	Have you received any <i>in-service training, training updates or refresher training</i> on topics specific to youth or adolescent friendly services?	YES, WITHIN PAST 24 MONTHS 1 YES, OVER 24 MONTHS AGO 2 NO TRAINING OR UPDATES 3					
	IF YES: Was the training, training update or refresher training within the past 24 months or more than 24 months ago?	NO INAMINO ON OF DATES					

#### DIABETES

207	In your <b>current</b> position, and as a part of your work for this facility, do you personally diagnose and/or manage <b>diabetes</b> ?	YES	
208	Have you received any <i>in-service training, training updates or refresher training</i> on topics specific to the diagnosis and/or management of diabetes?	YES, WITHIN PAST 24 MONTHS 1 YES, OVER 24 MONTHS AGO 2 NO TRAINING OR UPDATES 3	
	IF YES: Was the training, training update or refresher training within the past 24 months or more than 24 months ago?		

# CARDIO-VASCULAR DISEASES

209	In your <b>current</b> position, and as a part of your work for this facility, do you personally diagnose and/or manage cardio-vascular diseases such as hypertension?	YES 1 NO 2	
210	Have you received any <i>in-service training, training updates or refresher training</i> on the diagnosis and/or management of cardio-vascular diseases?	YES, WITHIN PAST 24 MONTHS 1 YES, OVER 24 MONTHS AGO 2 NO TRAINING OR UPDATES 3	
	IF YES: Was the training, training update or refresher training within the past 24 months or more than 24 months ago?		

## CHRONIC RESPIRATORY DISEASES

211	In your <b>current</b> position, and as a part of your work for this facility, do you personally diagnose and/or manage chronic respiratory conditions such as chronic obstructive pulmonary disease (COPD)?	YES 1 NO 2	
212	Have you received any <i>in-service training, training updates or refresher training</i> on the diagnosis and/or management of chronic respiratory diseases?	YES, WITHIN PAST 24 MONTHS1 YES, OVER 24 MONTHS AGO2 NO TRAINING OR UPDATES3	
	IF YES: Was the training, training update or refresher training within the past 24 months or more than 24 months ago?		

# 3. CHILD HEALTH SERVICES

300	In your current position, and as a part of your work for this facility, do you YES				
301	In your <b>current</b> position, and as a part of your work for this facility, do you personally provide any <b>child growth monitoring</b> services?	YES NO			
302	In your <b>current</b> position, and as a part of your work for this facility, do you personally provide any <b>child curative care</b> services?	-	YES 1 NO 2		
303	Have you received any <i>in-service training, training updates or refresher training</i> on topics related to child health or childhood illnesses?	YES 1 NO 2			→ 400
304	Have you received any <i>in-service training or training updates</i> in any of the following topics [READ TOPIC] IF YES: Was the training, training update or refresher training within the past 24 months or more the months ago?	topics [READ TOPIC]		YES, OVER 24 MONTHS AGO	NO IN-SERVICE TRAINING OR UPDATES
01	EPI OR COLD CHAIN MONITORING		1	2	3
02	INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESSES		1	2	3
06	DIAGNOSIS AND/OR TREATMENT OF ACUTE RESPIRATORY INFECTIONS		1	2	3
07	DIAGNOSIS AND/OR TREATMENT OF DIARRHEA		1	2	3
08	MICRONUTRIENT DEFICIENCIES AND/OR NUTRITIONAL ASSESSMENT		1	2	3
09	BREASTFEEDING		1	2	3
10	COMPLIMENTARY FEEDING IN INFANTS		1	2	3
11	PEDIATRIC HIV/AIDS		1	2	3
12	PEDIATRIC ART		1	2	3
13*	EARLY CHILDHOOD DEVELOPMENT		1	2	3
14	OTHER TRAINING ON CHILD HEALTH (SPECIFY) 1 2				3

## 4. FAMILY PLANNING SERVICES

400	In your <b>current</b> position, and as a part of your work for this facility, do you personally provide any <b>family planning</b> services?	YES 1 NO			
401	Have you received any <i>in-service training, training updates or refresher training</i> on topics related to family planning?	YES NO			→ 500
403	Have you received any in-service training, training updates or refresher training in any of the following topics [READ TOPIC]		YES,	YES,	NO
	IF YES: Was the training, training update or refresher training within the past 24 months or more than 24 months ago?		WITHIN PAST 24 MONTHS	OVER 24 MONTHS AGO	IN-SERVICE TRAINING OR UPDATES
01	GENERAL COUNSELING FOR FAMILY PLANNING		1	2	3
02	IUCD INSERTION AND/OR REMOVAL		1	2	3
03	IMPLANT INSERTION AND/OR REMOVAL		1	2	3
04	PERFORMING VASECTOMY		1	2	3
05	PERFORMING TUBAL LIGATION		1	2	3
06	CLINICAL MANAGEMENT OF FP METHODS, INCLUDING MANAGING SIDE EFFECTS		1	2	3
07	FAMILY PLANNING FOR HIV POSITIVE WOMEN		1	2	3
08	POST-PARTUM FAMILY PLANNING		1	2	3
09*	INJECTABLE CONTRACEPTIVES		1	2	3
10*	EMERGENCY CONTRACEPTIVE PILL		1	2	3
11	OTHER TRAINING ON FAMILY PLANNING (SPECIFY)		1	2	3

# 5. MATERNAL HEALTH SERVICES

# ANC - PNC - PMTCT

500	In your <b>current</b> position, and as a part of your work for this facility, do you personally provide any <b>antenatal care or postnatal care</b> services?					
	IF YES, PROBE AND INDICATE WHICH SERVICES ARE PROVIDED	,	NO, NEITHER			
501	Have you received any <i>in-service training, training updates or refresher training</i> on topics related to antenatal care or postnatal care?	YES NO			→ 503	
502	Have you received any <i>in-service training, training updates or refresher training</i> in any of the following topics [READ TOPIC] IF YES: Was the training, training update or refresher training within the past 24 months or more than 24 months ago?		YES, WITHIN PAST 24 MONTHS	YES, OVER 24 MONTHS AGO	NO IN-SERVICE TRAINING OR UPDATES	
01	ANC screening (e.g., blood pressure, urine glucose and protein)?		1	2	3	
02	Counseling for ANC (e.g., nutrition, birth planning, FP and newborn care)?		1	2	3	
03	Complications of pregnancy and their management?		1	2	3	
04	Nutritional assessment of the pregnant woman, such as Body Mass Index calculation and Mid-Upper Arm circumference measurement?			2	3	
06*	Postnatal care (PNC)		1	2	3	
503	Do you <i>personally</i> provide any services that are specifically geared toward preventing mother-to-child transmission of HIV? IF YES, ASK: Which specific services do you provide?	PREVENTIVE COUNSELING A HIV TEST COUNSELING B CONDUCT HIV TEST C PROVIDE ARV TO MOTHER D PROVIDE ARV TO INFANT E				
	INDICATE WHICH OF THE LISTED SERVICES ARE PROVIDED AND PROBE: Anything else?	NO PMTCT SER\	/ICES	Y		
504*	Have you received any <i>in-service training, training updates or refresher training</i> on topics related to maternal and/or newborn health?	YES NO			▶506	
505	Have you received any <i>in-service training, training updates or refresher training</i> in any of the following topics [READ TOPIC]		YES, WITHIN	YES, OVER	NO IN-SERVICE	
	IF YES: Was the training, training update or refresher training within the past 24 months or more than 24 months ago?		PAST 24 MONTHS	24 MONTHS AGO	TRAINING OR UPDATES	
02	Newborn nutrition counseling of mother with HIV?		1	2	3	
03	Infant and young child feeding		1	2	3	
04	Modified obstetric practices as relates to HIV (e.g., not rupturing membranes)?			2	3	

# DELIVERY SERVICES

506	In your <b>current</b> position, and as a part of your work for this facility, do you personally provide <u>delivery services</u> ? By that I mean conducting the actual delivery of newborns?	YES NO			→ 509
507	During the past 6 months, approximately how many deliveries have you conducted as the <i>main provider (include deliveries conducted for private practice and for facility)?</i>	TOTAL DELIVERIES			
508	When was the last time you used a partograph?	NEVER.         0           WITHIN PAST WEEK.         1           WITHIN PAST MONTH.         2           WITHIN PAST 6 MONTHS.         3           OVER 6 MONTHS AGO.         4			
509	Have you received any <i>in-service training, training updates or refresher training</i> on topics related to delivery care?	YES 1 NO 2			▶511
510	Have you received any <i>in-service training, training updates or refresher training</i> in any of the for [READ TOPIC] IF YES: Was the training, training update or refresher training within the past 24 months or more than 24 months ago?	ollowing topics	YES, WITHIN PAST 24 MONTHS	YES, OVER 24 MONTHS AGO	NO IN-SERVICE TRAINING OR UPDATES
01	Integrated Management of Pregnancy and Childbirth (IMPAC)?		1	2	3
02	Comprehensive Emergency Obstetric Care (CEmOC)?		1	2	3
03	Routine care for labor and normal vaginal delivery?		1	2	3
04	Active Management of Third Stage of Labor (AMTSL)?		1	2	3
05	Emergency obstetric care (EmOC)/Life saving skills (LSS) - in general?		1	2	3
06	Post abortion care?		1	2	3
07	Special delivery care practices for preventing mother-to-child transmission of HIV?		1	2	3

## NEWBORN CARE SERVICES

511	In your <b>current</b> position, and as a part of your work for this facility, do you personally provide care for the newborn?	YES 1 NO 2			
512	Have you received any <i>in-service training, training updates or refresher training</i> on topics related to newborn care?	YES			▶ 600
513	Have you received any <i>in-service training, training updates or refresher training</i> in any of the for [READ TOPIC] IF YES: Was the training, training update or refresher training within the past 24 months or more than 24 months ago?	ollowing topics	YES, WITHIN PAST 24 MONTHS	YES, OVER 24 MONTHS AGO	NO IN-SERVICE TRAINING OR UPDATES
01	Neonatal resuscitation using bag and mask		1	2	3
02	Early and exclusive breastfeeding		1	2	3
03	Newborn infection management (including injectable antibiotics)		1	2	3
04	Thermal care (including immediate drying and skin-to-skin care)		1	2	3
05	Sterile cord cutting and appropriate cord care		1	2	3
06	Kangaroo Mother Care (KMC) for low birth weight babies		1	2	3
07*	Helping Babies Breath		1	2	3
08*	Essential Newborn Care		1	2	3

## 6. SEXUALLY TRANSMITTED INFECTIONS - TB

#### SEXUALLY TRANSMITTED INFECTIONS

600	In your current position, and as part of your work for this facility, do you personally provide any STI services?	YES NO									
601	Have you received any <i>in-service training, training updates or refresher training</i> on topics related to STI services?	YES NO			●603						
602	Have you received any <i>in-service training, training updates or refresher training</i> in any of the fo [READ TOPIC]	bllowing topics	YES,	YES,	NO						
	IF YES: Was the training, training update or refresher training within the past 24 months or more than 24 months ago?	YES: Was the training, training update or refresher training within the past 24 months or more									
01	Diagnosing and treating sexually transmitted infections (STIs)		1	2	3						
02	The syndromic management for STIs		1	2	3						
03	Drug resistance to STI treatment medications		1	2	3						

#### TUBERCULOSIS

603	Now I will ask if you provide certain TB-related services. For each service, regardless of whether you currently provide it, I will also ask if you have received related <i>in-service training, training updates or refresher training</i>	,	u provide SERVICE]? (a)	upda	ceived training te on [SERVIC ithin 24 months (b)	E]?
	READ THE QUESTIONS FROM COLUMNS A AND B	YES	NO	YES, WITHIN 24 MONTHS	- / -	NO TRAINING
01	Diagnosis of tuberculosis based on sputum tests using AFB Smear Microscopy	1	2	1	2	3
02	Diagnosis of tuberculosis based on clinical symptoms or TB Diagnostic Algorithm	1	2	1	2	3
03	Treatment prescription for tuberculosis	1	2	1	2	3
04	Treatment follow-up services for tuberculosis	1	2	1	2	3
05	Direct Observation Treatment Short-course (DOTS) strategy	1	2	1	2	3
06	Management of TB - HIV co-infection	1	2	1	2	3
07	Management of MDR-TB or identification and referral of MDR-TB suspects	1	2	1	2	3

### 7. DIAGNOSTIC SERVICES

					•
700	In your <b>current</b> position, and as a part of your work for this facility, do you personally conduct laboratory tests? CIRCLE 'NO' IF THE PROVIDER ONLY COLLECTS SPECIMENS.	YES NO			→ 800
701	Please tell me if you personally conduct any of the following tests as part of your work in this facility		YES		NO
01	Microscopic examining of sputum for diagnosing tuberculosis		1		2
02	HIV rapid testing		1		2
03	Any other HIV test, such as PCR, ELISA, or Western Blot		1		2
04	Hematology testing, such as anemia testing		1		2
05	CD4 testing		1		2
06	Malaria microscopy		1		2
07	Malaria rapid diagnostic test (mRDT)		1		2
702	Have you received any <i>in-service training, training updates or refresher training</i> on topics related to the different diagnostic tests you conduct?	YES NO			→ 800
703	Have you received any <i>in-service training, training updates or refresher training</i> in any of th [READ TOPIC]	ne following topics	YES,	YES,	NO
	IF YES: Was the training, training update or refresher training within the past 24 months or more than 24 months ago?	9	WITHIN PAST 24 MONTHS	OVER 24 MONTHS AGO	IN-SERVICE TRAINING OR UPDATES
01	Microscopic examination of sputum for diagnosing tuberculosis		1	2	3
02	HIV testing		1	2	3
03	CD4 testing		1	2	3
04	Blood screening for HIV prior to transfusion?		1	2	3
05	Blood screening for Hepatitis B prior to transfusion?		1	2	3
06	Tests for monitoring ART such as TLC and serum creatinine.		1	2	3
07	Malaria microscopy		1	2	3
08	Malaria rapid diagnostic test (mRDT)		1	2	3

# 8. WORKING CONDITIONS IN FACILITY

-		
800	Now I want to ask you a few more questions about your work in this facility.	
	In an average week, how many hours do you work in this facility? IF WEEKS ARE NOT CONSISTENT, ASK THE RESPONDENT TO AVERAGE OUT HOW MANY HOURS	AVERAGE HOURS PER WEEK WORKING IN THIS FACILITY
	PER MONTH AND THEN DIVIDE THIS BY 4.	
801	Now I would like to ask you some questions about supervision you have personally received. This supervision may have been from a supervisor either in this facility, or from outside the facility. Do you receive technical support or supervision in your work?	YES, IN THE PAST 3 MONTHS.       1         YES, IN THE PAST 4-6 MONTHS.       2         YES, IN THE PAST 7-12 MONTHS.       3         YES, MORE THAN 12 MONTHS AGO.       4         NO.       5         804
	IF YES, ASK: When was the most recent time?	
802	How many times in the past six months has your work been supervised?	NUMBER OF TIMES
		EVERY DAY
803	The last time you were personally supervised, did your supervisor do any of the following:	YES NO DK
01	Check your records or reports?	CHECKED RECORD 1 2 8
02	Observe your work?	OBSERVED WORK 1 2 8
03	Provide any feedback (either positive or negative) on your performance?	FEEDBACK 1 2 8 05 - 05 -
04	Give you verbal or written feedback that you were doing your work well?	VERBAL PRAISE 1 2 8
05	Provide updates on administrative or technical issues related to your work?	PROVIDED UPDATES 1 2 8
06	Discuss problems you have encountered?	DISCUSSED PROBLEMS 1 2 8
804	Do you have a written job description of your current job or position in this facility? IF YES, ASK: May I see it?	YES, OBSERVED         1           YES, REPORTED, NOT SEEN         2           NO         3
805	Are there any opportunities for promotion in your current job?	YES.         1           NO.         2           UNCERTAIN/DON'T KNOW.         8
806	Which type(s) of salary supplement do you receive, if any?	MONTHLY OR DAILY SALARY SUPPLEMENT A PERDIEM WHEN ATTENDING TRAINING B
	PROBE: Anything else?	DUTY ALLOWANCE.       C         PAYMENT FOR EXTRA ACTIVITIES          (NOT ROUTINELY PROVIDED).       D         OTHER
		(SPECIFY) NONEY
807	In your current position, what non-monetary incentives have you received for the work you do, if any?	TIME OFF / VACATIONS A UNIFORMS, BACKPACKS, CAPS, etc B DISCOUNT MEDICINES, FREE TICKETS FOR CARE, VOUCHERS, etc C
	PROBE BY ASKING: Anything else? Any other options?	TRAINING
		NONE

808	Among the various things related to your working	MORE SUPPORT FROM
	situation that you would like to see improved, can	SUPERVISORA
	you tell me the three that you think would most	MORE KNOWLEDGE / UPDATES
	improve your ability to provide good quality of care	TRAININGB
	services? Please rank them in order of importance,	MORE SUPPLIES/STOCKC
	with 1 being the most important.	BETTER QUALITY EQUIPMENT/
		SUPPLIES D RANKING
	ENTER LETTER CORRESPONDING WITH THE	LESS WORKLOAD
	1ST MENTIONED INTO THE 1ST BOX, AND REPEAT	(i.e. MORE STAFF) E
	WITH THE 2ND AND 3RD.	BETTER WORKING HOURS /
		FLEXIBLE TIMES F
	IF THE PROVIDER ONLY MENTIONS 1 OR 2 ITEMS	MORE INCENTIVES
	PUT CODE "Y" IN THE REMAINING BOX OR BOXES.	(SALARY, PROMOTION,
		HOLIDAYS)G
		TRANSPORTATION FOR
		REFERRAL PATIENTS
		PROVIDING ART.
		PROVIDING PEPJ
	DO NOT READ CHOICES TO YOUR RESPONDENT	INCREASED SECURITY
		BETTER FACILITY
l		INFRASTRUCTUREL
		MORE AUTONOMY
		/ INDEPENDENCE M
		EMOTIONAL SUPPORT FOR
		STAFF (COUNSELING /
		SOCIAL ACTIVITIES)N
		OTHER (SPECIFY) X
		NO PROBLEM
	THANK YOUR RESPONDENT AND MOVE TO THE NEXT DATA COLLECTION	I POINT

# **PROVIDER LISTING FORM**

		л Ш	(2)			SELECTED FO НЕАLTH WORI INTERVIEW	01	02	03	04	05	06	07	08	60	10	11	12	13	14	15	16	17	18	19	20
		FACILITY. COMPILE THIS LIST AS THE TEAM MOVES FROM ONE SERVICE AREA (OR DEPARTMENT) TO ANOTHER OBTAINING WHICH INVENTORY SECTIONS ARE BEING WHICH INVENTORY SECTIONS ARE BEING "PROVIDER QUALIFICATIONS ARE BEING "PROVIDER QUALIFICATION CODE", AND THE PROVIDER'S GENDER UNDER COLUMN 4 "GENDER". PUT CHECK MARKS IN THINON TO INDICATE THE SERVICE THAT THE PROVIDER IN THE FACILITY. INCOLUMN 6 "INTERVIEWED FOR VED FOR ANY SECTION OF THE INVENTORY QUESTIONNAIRE. FINALLY, INCOLUMN 7 "SELECTED FOR HEALTH WORKER VED FOR ANY SECTION OF THE INVENTORY QUESTIONNAIRE. FINALLY, INCOLUMN 7 "SELECTED FOR HEALTH WORKER BE INTERVIEWED WITH THE INDIVIDUAL HEALTH WORKER QUESTIONNAIRE.	(9)	ਮ ਪ	о ғо	інтеруіемеі Інуенторү	01	02	03	04	05	06	07	08	60	10	11	12	13	14	15	16	17	18	19	20
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	FACILITY NUMBER	LIST ALL CLINICAL STAFF / PROVIDERS WHO ARE PRESENT TODAY IN THIS FACILITY. COMPILE THIS LIST AS THE TEAM MOVES FROM ONE SERVICE AREA (OR DEPARTMENT) TO ANOTHER OBTAINING INFORMATION ON THE SERVICES THAT THE FACILITY PROVIDES AND FOR WHICH INVENTORY SECTIONS ARE BEING COMPLETED, AND/OR FOR WHICH CLIENT-PROVIDER OBSERVATIONS ARE BEING DONE. WRITE THE HEALTH WORKER'S QUALIFICATION CODE IN COLUMN 3 "PROVIDER QUALIFICATION CODE", AND THE PROVIDER'S GENDER UNDER COLUMN 4 "GENDER". PUT CHECK MARKS IN THE APPROFYTE HEAD THE FACILITY WORKER'S GUALIFICATION CODE IN COLUMN 3 "PROVIDER QUALIFICATION CODE", AND THE PROVIDER'S GENDER UNDER COLUMN 4 "GENDER". PUT CHECK MARKS IN THE APPROFYTE HEAD THE HEALTH WORKER'S QUALIFICATION CODE IN COLUMN 3 "PROVIDER QUALIFICATION OF THE PROVIDER REVORDER IN THE PROVIDER IN THE PROVIDER IN THE FACILITY. INCOLUMN 4 "GENDER". PUT CHECK MARKS IN THE APPROFYTE RELEDINGS TO LUMN 5 "SERVICES PROVIDED IN FACILITY" TO INDICATE THE SERVICE THAT THE PROVIDER IN THE FACILITY. INCOLUMN 7 "SELECTED FOR HEALTH WORKER INVENTORY", CIRCLE THE LINE NUMBER IF THE PROVIDER WAS INTERVIEWED FOR ANY SECTION OF THE INVENTORY QUESTIONNAIRE. FINALLY, INCOLUMN 7 "SELECTED FOR HEALTH WORKER INVENTORY" CIRCLE THE LINE NUMBER IF THE PROVIDER IS SELECTED TO BE INTERVIEWED WITH THE INDIVIDUAL HEALTH WORKER QUESTIONNAIRE. FINALLY, INCOLUMN 7 "SELECTED FOR HEALTH WORKER INTERVIEWER CIRCLE THE LINE NUMBER IF THE PROVIDER IS SELECTED TO BE INTERVIEWED WITH THE INDIVIDUAL HEALTH WORKER QUESTIONNAIRE. FINALLY, INCOLUMN 7 "SELECTED TO BE INTERVIEWED WITH THE INDIVIDUAL HEALTH WORKER QUESTIONNAIRE. FILL LINE NUMBER IF THE PROVIDER IS SELECTED TO BE INTERVIEWED WITH THE INDIVIDUAL HEALTH WORKER QUESTIONNAIRE.	(2)			NAME OF PROVIDER																				
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SPECIALIST MEDICINE [INCLUDING CARDIOLOGY]	MATRON 12
SPECIALIST GENERAL SURGERY	NURSING SUPERVISOR13
SPECIALIST OBSTETRICS / GYNECOLOGY	SENIOR STAFF NURSE14
SPECIALIST PEDIATRICS	ASSISTANT NURSE / STAFF NURSE (PRIVATE FACILITY) 15
SPECIALIST PSYCHIATRY	FAMILY WELFARE VISITOR (FWV) 11
SPECIALIST ANESTHESIA	FAMILY WELFARE ASSISTANT (FWA)
ANY OTHER SPECIALIST NOT LISTED ABOVE	HEALTH ASSISTANT1
	COMMUNITY HEALTH CARE PROVIDER
MEDICAL OFFICER (MBBS) (ANY NON-SPECIALIST	HEALTH INSPECTOR.
DOCTOR, INCLUDING ASSISTANT SURGEON, EMO,	ASSISTANT HEALTH INSPECTOR
MO, MCH/FP, RMO, REGARDLESS OF DESIGNATION	NUTRITIONIST2
OR TITLE)	HEALTH EDUCATOR
	MEDICAL TECHNOLOGIST - LABORATORY25
MEDICAL OFFICER - ANESTHETIST	MEDICAL TECHNOLOGIST - EPI
DENTAL SURGEON	MIDWIFE
SACMO / MEDICAL ASSISTANT	PARAMEDICS
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		FACILITY. COMPILE THIS LIST AS THE TEAM MOVES FROM ONE SERVICE AREA (OR DEPARTMENT) TO ANOTHER OBTAINING WHICH INVENTORY SECTIONS ARE BEING COMPLETED, AND/OR FOR WHICH CLIENT-PROVIDER OBSERVATIONS ARE BEING <b>"PROVIDER QUALIFICATION CODE"</b> , AND THE PROVIDER'S GENDER UNDER COLUMN 4 "GENDER". PUT CHECK MARKS IN THE <b>"PROVIDER RUALIFICATION CODE"</b> , AND THE PROVIDES IS THE FACILITY. INCOLUMN 6 "INTERVIEWED FOR UNDICATE THE SERVICE THAT THE PROVIDES IN THE FACILITY. INCOLUMN 6 "INTERVIEWED FOR BE INTERVIEWED FOR ANY SECTION OF THE INVENTORY QUESTIONNAIRE. FINALLY. INCOLUMN 7 "SELECTED FOR HEALTH WORKER BE INTERVIEWED WITH THE INDIVIDUAL HEALTH WORKER QUESTIONNAIRE.	(9)	2	D FOI	іитеруіеме іилеитору	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
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SPECIALIST MEDICINE [INCLUDING CARDIOLOGY]01	MATRON 12
SPECIALIST GENERAL SURGERY	NURSING SUPERVISOR
SPECIALIST OBSTETRICS / GYNECOLOGY	SENIOR STAFF NURSE 14
SPECIALIST PEDIATRICS04	ASSISTANT NURSE / STAFF NURSE (PRIVATE FACILITY) 15
SPECIALIST PSYCHIATRY05	FAMILY WELFARE VISITOR (FWV)
SPECIALIST ANESTHESIA06	FAMILY WELFARE ASSISTANT (FWA)17
ANY OTHER SPECIALIST NOT LISTED ABOVE	HEALTH ASSISTANT18
	COMMUNITY HEALTH CARE PROVIDER
MEDICAL OFFICER (MBBS) (ANY NON-SPECIALIST	HEALTH INSPECTOR.
DOCTOR, INCLUDING ASSISTANT SURGEON, EMO,	ASSISTANT HEALTH INSPECTOR
IMO, MCH/FP, RMO, REGARDLESS OF DESIGNATION	NUTRITIONIST22
OR TITLE)	HEALTH EDUCATOR
	MEDICAL TECHNOLOGIST - LABORATORY
MEDICAL OFFICER - ANESTHETIST	MEDICAL TECHNOLOGIST - EPI
DENTAL SURGEON10	MIDWIFE
SACMO / MEDICAL ASSISTANT11	PARAMEDICS
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SPECIALIST MEDICINE [INCLUDING CARDIOLOGY]	MATRON
SPECIALIST OBSTETRICS / GYNECOLOGY	SENIOR STAFF NURSE 14
SPECIALIST PEDIATRICS	ASSISTANT NURSE / STAFF NURSE (PRIVATE FACILITY) 15
SPECIALIST PSYCHIATRY	FAMILY WELFARE VISITOR (FWV)16
SPECIALIST ANESTHESIA	FAMILY WELFARE ASSISTANT (FWA)
ANY OTHER SPECIALIST NOT LISTED ABOVE	HEALTH ASSISTANT18
	COMMUNITY HEALTH CARE PROVIDER19
MEDICAL OFFICER (MBBS) (ANY NON-SPECIALIST	HEALTH INSPECTOR
DOCTOR, INCLUDING ASSISTANT SURGEON, EMO,	ASSISTANT HEALTH INSPECTOR21
IMO, MCH/FP, RMO, REGARDLESS OF DESIGNATION	NUTRITIONIST22
OR TITLE)	HEALTH EDUCATOR 23
	MEDICAL TECHNOLOGIST - LABORATORY
MEDICAL OFFICER - ANESTHETIST	MEDICAL TECHNOLOGIST - EPI26
DENTAL SURGEON	MIDWIFE
SACMO / MEDICAL ASSISTANT	PARAMEDICS
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	(SPECIFY)

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ASSISTANT NURSE / STAFF NURSE (PRIVATE FACILITY). FAMILY WELFARE VISITOR (FWV) FAMILY WELFARE ASSISTANT (FWA). HEALTH ASSISTANT COMMUNITY HEALTH INSPECTOR. HEALTH INSPECTOR. ASSISTANT HEALTH INSPECTOR. ASSISTANT HEALTH INSPECTOR. MUTRITIONIST. MEDICATOR. MEDICATOR M	SPECIALIST OBSTETRICS / GYNECOLOGY	SENIOR STAFF NURSE14
05     FAMILY WELFARE VISITOR (FWV)       06     FAMILY WELFARE ASSISTANT (FWA)       07     HEALTH ASSISTANT       08     HEALTH ASSISTANT       08     HEALTH INSPECTOR       08     ASSISTANT HEALTH INSPECTOR       09     NUTRITIONIST       01     ASSISTANT HEALTH INSPECTOR       02     NUTRITIONIST       03     MEDICAL TECHNOLOGIST - LABORATORY       04     MEDICAL TECHNOLOGIST - EPI       07     PARAMEDICS	SPECIALIST PEDIATRICS	ASSISTANT NURSE / STAFF NURSE (PRIVATE FACILITY) 15
06         FAMILY WELFARE ASSISTANT (FWA).           07         07           07         HEALTH ASSISTANT (FWA).           07         COMMUNITY HEALTH CARE PROVIDER.           08         HEALTH INSPECTOR.           08         ASSISTANT HEALTH INSPECTOR.           08         NUTRITIONIST.           09         MEDICAL TECHNOLOGIST - LABORATORY.           10         PEDICAL TECHNOLOGIST - EPI.           11         OTHER	SPECIALIST PSYCHIATRY	FAMILY WELFARE VISITOR (FWV)
07     HEALTH ASSISTANT.       08     COMMUNITY HEALTH CARE PROVIDER.       08     HEALTH INSPECTOR.       01     ASSISTANT HEALTH INSPECTOR.       01     NUTRITIONIST.       02     NUTRITIONIST.       03     MEDICAL TECHNOLOGIST - LABORATORY.       04     MIDWIFE.       05     MIDWIFE.	SPECIALIST ANESTHESIA	FAMILY WELFARE ASSISTANT (FWA)17
1,	ANY OTHER SPECIALIST NOT LISTED ABOVE	HEALTH ASSISTANT18
Image: Microson Constraint Health Inspector.       DN       Assistant Health Inspector.       SSISTANT HEALTH INSPECTOR.       SSISTANT HEALTH INSPECTOR.       NUTRITIONIST.       HEALTH EDUCATOR       MEDICAL TECHNOLOGIST - LABORATORY.       10       MIDWIFE.       11		COMMUNITY HEALTH CARE PROVIDER
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HEALTH EDUCATOR	IMO, MCH/FP, RMO, REGARDLESS OF DESIGNATION	NUTRITIONIST22
MEDICAL TECHNOLOGIST - LABORATORY	OR TITLE)	HEALTH EDUCATOR 23
		MEDICAL TECHNOLOGIST - LABORATORY
MIDWIFE	MEDICAL OFFICER - ANESTHETIST	MEDICAL TECHNOLOGIST - EPI
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OTHER	SACMO / MEDICAL ASSISTANTSACMO / MEDICAL ASSISTANT.	PARAMEDICS
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SPECIALIST MEDICINE [INCLUDING CARDIOLOGY]	DOCTOR, INCLUDING ASSISTANT SURGEON, EMO, IMO, MCH/FP, RMO, REGARDLESS OF DESIGNATION OR TITLE) MEDICAL OFFICER - ANESTHETIST
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	) 15 16 		19	20	21	22	23	25		30	31		
MATRON	ASSISTANT NURSE / STAFF NURSE (PRIVATE FACILITY) FAMILY WELFARE VISITOR (FWV)	FAMILY WELFARE ASSISTANT (FWA)	COMMUNITY HEALTH CARE PROVIDER	HEALTH INSPECTOR	ASSISTANT HEALTH INSPECTOR	NUTRITIONIST	HEALTH EDUCATOR	MEDICAL TECHNOLOGIST - LABORATORY	MEDICAL TECHNOLOGIST - EPI	MIDWIFE	PARAMEDICS	OTHER	(SPECIFY)