



# Nepal

## Health Facility Survey 2015

### PRELIMINARY REPORT



Government of Nepal  
Ministry of Health  
2016



# Nepal Health Facility Survey 2015

## Preliminary Report

Ministry of Health  
Ramshah Path, Kathmandu

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Kathmandu, Nepal

NHSSP  
Kathmandu, Nepal

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Rockville, Maryland USA

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## ACRONYMS AND ABBREVIATIONS

ACT	artemisinin combination therapy
ANC	antenatal care
ART	antiretroviral therapy
ARV	antiretroviral drug
BCG	Bacillus Calmette-Guérin
CAFE	computer assisted field editing
CAPI	computer assisted personal interviewing
CBC	complete blood count
CoFP/C	comprehensive family planning and counseling
DfID	Department for International Development
DHS	Demographic and Health Survey
FARHCS	Facility Assessment for Reproductive Health Commodities and Services
HFOMC	Health Facility Operation and Management Committee
HMIS	Health Management Information System
HDC	Hospital Development Committee
HDP	Health Development Partner
HP	health post
HTC	HIV Testing and Counseling
IFSS	internet file streaming system
IMNCI	integrated management of neonatal and childhood illness
IUCD	intra-uterine contraceptive device
JE	Japanese encephalitis
LMIS	logistic management information system
MDR	multi-drug resistance
MR	measles-rubella
MVA	manual vacuum aspiration
NCD	noncommunicable disease
NHFS	Nepal Health Facility Survey
NHSSP	Nepal Health Sector Support Program
NGO	nongovernmental organization
NMS	national medical standard
ORS	oral rehydration salts
PCV	pneumococcal conjugate vaccine
PHCC	primary health care center
PMTCT	prevention of mother-to-child transmission of HIV
QA	quality assurance
RDT	rapid diagnostic test
SARA	service availability and readiness assessment
SC	Steering Committee
SP	sulfadoxine/pyrimethamine
SPA	service provision assessment
STI	sexually transmitted infection
TB	tuberculosis
TWC	Technical Working Committee
UHC	urban health center
UNFPA	United Nation Fund for Population Activities
USAID	United States Agency for International Development
WHO	World Health Organization



# 1 INTRODUCTION

## 1.1 Background

Harmonization of health facility surveys for rational allocation of scarce resources has been a priority for the Ministry of Health (MoH) and Health Development Partners (HDPs) for some time. In 2014, the MoH and HDPs agreed to harmonize health facility surveys conducted in Nepal; the 2015 Nepal Health Facility Survey (2015 NHFS) is the direct result of this agreement. It is the first comprehensive national-level health facility survey in Nepal that combines the essence of USAID-supported Service Provision Assessment (SPA) survey of The DHS Program, WHO's Service Availability and Readiness Assessment (SARA), UNFPA's Facility Assessment for Reproductive Health Commodities and Services (FARHCS), and the Nepal-specific Service Tracking Survey (implemented with support from the Nepal Health Sector Support Program [NHSSP] - a DfID-funded technical assistance program supporting MoH to implement the second Nepal Health Sector Program [NHSP-2]).

The United Kingdom's Department for International Development (DfID) provided funding for the local costs of the 2015 NHFS through the Nepal Health Sector Support Program (NHSSP). New ERA, a private research firm, implemented the survey with technical assistance from The DHS Program of ICF International. The United States Agency for International Development (USAID) provided the financial support for the technical assistance provided by The DHS Program.

A steering committee (SC) and a technical working committee (TWC) composed of senior officials from MoH, HDPs, academia, and organizations and institutions in the health sector were formed to oversee all policy and technical aspects of the survey.

This preliminary report presents provisional results on the availability and preparedness of health facilities to provide maternal and child health, family planning, and other services based on information collected from the different types of health facilities. This information will help health program managers and policy makers prioritize interventions that will enhance the provision of quality health services. A comprehensive report on the survey findings will be published later in 2016. The data in the final report are not expected to differ substantially from the findings presented in this preliminary report; however, the results presented here should be regarded as provisional and may be subject to change.

## 1.2 Survey Objectives

The general objective of the 2015 NHFS was to collect information on the availability and delivery of health care services in Nepal and to examine the readiness of facilities to provide quality health services. These services were in the areas of child health, maternal and newborn care, family planning, sexually transmitted infections, HIV and AIDS, tuberculosis, malaria, and other diseases. The specific objectives of the 2015 NHFS were to collect and provide the following information:

1. Overall availability of specific services in Nepalese health facilities
2. *General* readiness of health facilities to provide client services
3. *Service-specific* readiness of health facilities
4. Quality of services
5. Client perception, feedback, and accountability systems
6. Baseline measures for future progress



## 2 SURVEY IMPLEMENTATION

### 2.1 Sample Design

The 2015 NHFS was a sample survey of formal sector health facilities designed to provide representative results for Nepal, for different facility types (public hospitals, primary health care centers [PHCCs], health posts [HPs], urban health centers [UHCs], stand-alone HIV testing and counseling sites [HTCs], and private hospitals), for different managing authorities (government and private), and for each of the 13 geo-ecological regions of the country. Stratification was achieved by separating the health facilities by facility type within each district. Private hospitals were further stratified by number of beds within domain: hospitals with over 100 in-patient beds and those with less than 100 in-patient beds, where applicable.

A master list of 4,719 formal-sector health facilities in Nepal was obtained from the MoH and used as the sampling frame for the survey. A total of 1000 facilities were selected for the survey; by design, the sample included all nonspecialized government hospitals, all private hospitals with 100 or more inpatient beds, and all PHCCs. The remainder of facilities consisted of a sample of health posts, private hospitals with fewer than 100 beds, stand-alone HTC sites, and UHCs. Table 2.1.1 presents a breakdown of the sampled facilities and the outcome of visits to those facilities. Eight sampled facilities turned out to be duplicates, resulting in an effective sample size to 992 facilities. The table shows that 97 percent of sampled facilities (963) were successfully surveyed. About 2 percent of sampled facilities (comprised mostly of private hospitals and stand-alone HTC facilities) could not be surveyed for various reasons.

Table 2.1.1 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, Nepal HFS 2015

Background characteristics	Completed	Respondent not available	Refused	Closed/not yet functional	Others (Unreachable/specialized etc.)	Total percent	Number of facilities in sample
<b>Facility type</b>							
Zonal and above hospitals	100.0	0.0	0.0	0.0	0.0	100.0	27
District level hospitals	100.0	0.0	0.0	0.0	0.0	100.0	76
Private hospitals	86.7	0.0	1.8	0.6	10.8	100.0	166
PHCCs	100.0	0.0	0.0	0.0	0.0	100.0	200
HPs	99.8	0.2	0.0	0.0	0.0	100.0	424
UHCs	95.7	0.0	0.0	4.3	0.0	100.0	47
Stand-alone HTCs	94.1	0.0	0.0	2.0	3.9	100.0	51
Other public hospital	0.0	0.0	0.0	0.0	100.0	100.0	1
<b>Managing authority</b>							
Public	99.5	0.1	0.0	0.3	0.1	100.0	775
Private	88.5	0.0	1.4	0.9	9.2	100.0	217
<b>Ecological region</b>							
Mountain	98.5	0.0	0.0	0.0	1.5	100.0	137
Hill	97.2	0.2	0.4	0.6	1.5	100.0	470
Terai	96.4	0.0	0.3	0.3	3.1	100.0	385
<b>Earthquake-affected districts (14)<sup>1</sup></b>							
	96.3	0.0	0.9	0.0	2.8	100.0	218
Total	97.1	0.1	0.3	0.4	2.1	100.0	992

Note: Some of the rows may not add up to 100 percent due to rounding.

<sup>1</sup> The 14 earthquake-affected districts are: Sindhupalchowk, Kathmandu, Nuwakot, Dhading, Rasuwa, Gorkha, Kavre, Bhaktapur, Lalitpur, Dolakha, Makwanpur, Ramechhap, Okhaldhunga and Sindhuli.

Table 2.1.2 presents the weighted<sup>1</sup> percent distribution of the facilities that were successfully surveyed, by background characteristics. The majority of facilities in the country (using adjusted/weighted

<sup>1</sup> Due to the non-proportional allocation of the sampled health facilities to the different domains and to the different health facility types, sampling weights are required for analysis to ensure the actual representation of the survey results at national and domain levels, as well as at the health facility type and management authority levels. Sampling weights were calculated separately based on sampling probabilities for each sampling stratum. The health facility design weight was adjusted for non-response at the sampling stratum level to obtain the health facility sampling weight. The sampling weight was then normalized at the national level to get the health facility standard weight. The normalization of the sampling weight is intended to ensure the total number of unweighted cases equals the total number of weighted cases at the national level.

proportions to reflect actual facility distribution in Nepal) are HPs, at approximately 81 percent. Table 2.1.3 shows the distribution of successfully surveyed facilities by facility type and managing authority. For ease of presenting survey findings, NGO/private not-for-profit facilities, private for-profit facilities, and mission/faith-based facilities are grouped into one “private” category. In all tables in this report, “private” therefore refers to the combined total of NGO/private not-for-profit, private-for-profit, and mission/faith-based facilities.

**Table 2.1.2 Distribution of surveyed facilities, by background characteristics**

Percent distribution and number of surveyed facilities, by background characteristics, Nepal HFS 2015

Background characteristics	Weighted percent distribution of surveyed facilities	Number of facilities surveyed	
		Weighted	Unweighted
<b>Facility type</b>			
Zonal and above hospitals	0.6	6	27
District level hospitals	1.6	16	76
Private hospitals	7.2	70	144
PHCCs	4.4	42	200
HPs	80.5	775	423
UHCs	3.3	32	45
Stand-alone HTC	2.3	23	48
<b>Managing authority</b>			
Public	90.4	871	771
Private	9.6	92	192
<b>Ecological region</b>			
Mountain	12.3	118	135
Hill	51.1	492	457
Terai	36.6	353	371
<b>Earthquake-affected districts (14)</b>			
	20.7	200	210
<b>Total</b>	<b>100.0</b>	<b>963</b>	<b>963</b>

**Table 2.1.3 Distribution of surveyed facilities, by managing authority (weighted)**

Weighted number of surveyed facilities of each type, by managing authority, Nepal HFS 2015

Facility type	Managing authority				Total
	Government/ Public	NGO/Private not- for-profit	Private for-profit	Mission/ Faith-based	
<b>Facility type</b>					
Zonal and above hospitals	6	0	0	0	6
District level hospitals	16	0	0	0	16
Private hospitals	0	8	61	1	70
PHCCs	42	0	0	0	42
HPs	775	0	0	0	775
UHCs	32	0	0	0	32
Stand-alone HTC	0	23	0	0	23
<b>Total</b>	<b>871</b>	<b>31</b>	<b>61</b>	<b>1</b>	<b>963</b>

## 2.2 Data Collection Instruments

To achieve the objectives of the assessment and to capture information in various categories, data were collected using a variety of instruments.

- A **Facility Inventory Questionnaire** was used to obtain information on service availability as well as preparedness to provide each of the services assessed. The Facility Inventory Questionnaire collects information on the availability of specific items (including their location and functional status), components of support systems (e.g., logistics and management), and facility infrastructure, including the service delivery environment. Hence, the person most knowledgeable about the organisation of services at the facility and/or the most knowledgeable provider of each service/department/section was interviewed with the relevant section of the Facility Inventory Questionnaire. If another provider needed to provide specific information to complete a section of the questionnaire, that provider was invited (or visited, when necessary) and asked to provide that information.

The Facility Inventory Questionnaire is organised into the following three modules:

1. **Module 1** collects information on general service availability.
  2. **Module 2** collects information on *general facility readiness*. This module is organized into seven sections covering topics such as facility infrastructure (sources of water, electricity, etc.), 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.
  3. **Module 3** collects information on *service-specific readiness*. The sections cover child health (child vaccination, growth monitoring, and curative care); family planning; antenatal care; prevention of mother-to-child transmission of HIV (PMTCT); delivery and newborn care; infectious diseases such as tuberculosis, malaria, and HIV/AIDS; and non-communicable diseases (NCDs), including diabetes, chronic respiratory diseases, and cardiovascular diseases.
- A **Health Provider Questionnaire** was used to collect information from a sample of health service providers on their qualifications, supervision, and in-service training, as well as their perceptions of the service delivery environment.
  - **Observation protocols** were used to capture key components of consultations with antenatal care and family planning clients as well as consultations with sick children under age 5. Once in a facility, interviewers attempted to observe a sample of each type of consultation as they occurred. The top three panels of Table 2.2 present the number and percent distribution of observations of actual and weighted antenatal care, family planning, and sick child consultations. The survey observed a total of 2,186 sick child, 1,509 antenatal care (ANC), and 772 family planning consultations.
  - Antenatal care and family planning clients, and caretakers of sick children whose consultations were observed, were interviewed using the client **Exit Interview Questionnaire** to assess their understanding of the consultation as part of their visit to the facility. The number of exit interviews correspond with the number of observations presented in Table 2.2.
  - In addition to exit interviews with ANC and family planning clients and caretakers of observed sick children, the survey also interviewed postpartum clients as they were discharged from facilities using the **Exit Interview Questionnaire for Postpartum Women**; these interviews took place only in facilities that offered delivery services. Unlike antenatal care, family planning, and curative care for sick children, there were no observations of delivery services in this survey.
  - Finally, the survey used the **Health Facility Operation and Management Committee (HFOMC)/Hospital Development Committee (HDC) Member Questionnaire** to interview a convenient sample of HFOMC and HDC members in government facilities. Information on the distribution of HFOMC and HDC members interviewed, and the numbers of facilities where these interviews took place is presented in Table 12.1.

Table 2.2 Distribution of observed consultations

Percent distribution and weighted and unweighted number of observed consultations for outpatient curative care for sick children, family planning, and antenatal care, and percent distribution and weighted and unweighted number of exit interviews with postpartum mothers, by background characteristics, Nepal HFS 2015

Background characteristics	Percent distribution of observed consultations	Number of observed consultations	
		Weighted	Unweighted
<b>OUTPATIENT CURATIVE CARE FOR SICK CHILDREN</b>			
<b>Facility type</b>			
Zonal and above hospitals	7.5	164	164
District level hospitals	10.8	235	371
Private hospitals	14.1	308	318
PHCCs	6.7	146	562
HPs	59.8	1,306	732
UHCs	1.2	26	39
<b>Managing authority</b>			
Public	85.9	1,878	1,868
Private	14.1	308	318
<b>Ecological region</b>			
Mountain	8.7	189	274
Hill	44.7	977	1,019
Terai	46.6	1,019	893
<b>Earthquake-affected districts (14)</b>			
	24.0	526	490
<b>Total</b>	<b>100.0</b>	<b>2,186</b>	<b>2,186</b>
<b>FAMILY PLANNING</b>			
<b>Facility type</b>			
Zonal and above hospitals	5.0	38	74
District level hospitals	8.1	62	140
Private hospitals	2.2	17	32
PHCCs	10.5	81	238
HPs	70.5	544	258
UHCs	3.8	29	30
<b>Managing authority</b>			
Public	97.8	755	740
Private	2.2	17	32
<b>Ecological region</b>			
Mountain	9.8	76	96
Hill	49.6	383	366
Terai	40.6	313	310
<b>Earthquake-affected districts (14)</b>			
	31.3	241	228
<b>Total</b>	<b>100.0</b>	<b>772</b>	<b>772</b>
<b>ANTENATAL CARE</b>			
<b>Facility type</b>			
Zonal and above hospitals	11.7	176	178
District level hospitals	16.8	254	344
Private hospitals	19.3	292	266
PHCCs	11.4	172	415
HPs	40.4	610	295
UHCs	0.4	5	11
<b>Managing authority</b>			
Public	80.7	1,217	1,243
Private	19.3	292	266
<b>Ecological region</b>			
Mountain	3.2	48	99
Hill	45.8	691	723
Terai	51.0	770	687
<b>Earthquake-affected districts (14)</b>			
	27.6	417	354
<b>Total</b>	<b>100.0</b>	<b>1,509</b>	<b>1,509</b>
<b>POSTPARTUM MOTHER</b>			
<b>Facility type</b>			
Zonal and above hospitals	30.4	94	92
District level hospitals	36.1	111	112
Private hospitals	31.3	97	94
PHCCs	1.7	5	10
HPs	0.6	2	1
UHCs	0.0	0	0
<b>Managing authority</b>			
Public	68.7	212	215
Private	31.3	97	94
<b>Ecological region</b>			
Mountain	3.7	11	23
Hill	58.8	182	159
Terai	37.5	116	127
<b>Earthquake-affected districts (14)</b>			
	35.0	108	80
<b>Total</b>	<b>100.0</b>	<b>309</b>	<b>309</b>



## **2.3 Data Collection Approaches**

The Inventory, Health Provider, and HFOMC/HDC questionnaires were loaded onto tablet computers, which were used during interviews to ask questions and also record responses (computer assisted personal interviewing–CAPI). The observation protocols and all client exit interviews were administered as paper based questionnaires, but responses were entered into pre-loaded computer programs in the field (computer assisted field editing–CAFE). All data were reviewed in the field, and the first round of secondary editing was performed before transmittal to the survey central office using the internet file streaming system [IFSS]) for further processing.

## **2.4 Training**

### *Pre-test*

Pre-test training for the 2015 NHFS took place over a three-week period in January/February 2015 in Kathmandu and Bhaktapur districts. Nine interviewers (7 medical doctors [6 male and 1 female] and 2 female nurses) were trained in the use of the questionnaires and computer programs as interviewers and as prospective facilitators for the main training. Pre-test data collection took place over a 3-day period in February 2015 in Chitwan district. Five health facilities were successfully surveyed during this period, including one general hospital, three PHCCs, and one HP. Following the pre-test, the survey questionnaires and computer programmes were finalised for the main training.

### *Main Interviewer Training*

One week before the start of main interviewer training (March 15 – 19, 2015), DHS technical staff facilitated a training of trainers' (ToT) workshop to provide New ERA trainers with knowledge and skills for effective training and facilitation.

The main interviewer training for the 2015 NHFS took place March 22 – April 17, 2015, in Godavari. New ERA conducted the training, in Nepali, with DHS staff providing technical support. Eighty-nine potential interviewers (68 female, 21 male) participated. Almost all the female trainees were nursing graduates (BSc Nursing or Bachelors of Nursing), while the male candidates were mainly public health graduates with a health assistant background. The training included classroom lectures and discussions, practical demonstrations, mock interviews, role plays, and field practices. Video clips of mock interviews as well as actual FP, ANC and sick child consultations were prepared and used to train the trainees. The first 2 weeks of training were dedicated exclusively to training interviewers on the use of paper questionnaires and also to one 2-day field practice. The 2 days of field practice were devoted to ensuring that the participants understood the content of the paper questionnaires as well as how to organise themselves in a health facility.

During the third and fourth weeks of training, interviewer trainees were introduced to tablet computers and how to use them for data collection (CAPI) and for data entry and editing (CAFE). This was done using completed paper questionnaires from the facilities visited during the pre-test and from field practice during the first 2 weeks of main training. During the third week, participants practiced all questionnaire types by using both CAPI and CAFE approaches in teams and in pairs.

At the end of training, 3 of the 89 interviewers were released based on test scores and their overall performance during the training period. Subsequently 20 data collection teams were formed (15 teams of 4 interviewers and 5 teams of 5 interviewers).

## **2.5 Data Collection**

As a result of the earthquake that occurred on April 25, 2015, survey data collection took place in two phases. Phase 1 of data collection took place April 20 – 25, 2015, with all 20 teams collecting data in Sunsari, Jhapa, and Morang districts. Phase 2 of data collection took place June 4 – November 5, 2015, when the situation was assessed and determined to be practically feasible for survey data collection in post-

earthquake context. Data collection in the 14 districts most affected by the earthquake took place in October and November 2015.

## **2.6 Data Analysis**

Several conventions were observed during the analysis of the 2015 NHFS data:

- First, unless otherwise indicated, the 2015 NHFS considered as available only those items seen (observed) by the interviewers themselves.
- Second, in a majority of facilities, multiple health workers contribute to the services received by clients. The health worker who ultimately assesses the client, makes the final diagnosis, and prescribes any treatment, if necessary, is identified as the primary provider for the particular service. This health worker is the provider that the survey observed using the observation protocol for the applicable service.
- Third, quite often certain measurements (e.g., measuring blood pressure and temperature) are routinely done by health providers other than the primary provider, and separate from the actual consultation. Where this system is used and witnessed by interviewers, and all clients receive these measurements as part of their visit, then clients who are selected for observation are assumed to have received these measurements, even if the primary provider did not take these measurements.

### 3 BASIC HEALTH SERVICES AND AMENITIES

#### 3.1 Availability of Basic Client Services

Table 3.1 shows the availability of various health services<sup>2</sup>. Child health services (child curative care, child growth monitoring and child vaccination) are widely available. In fact, practically all facilities offer child curative care (100 percent) and child growth monitoring (96 percent), while 87 percent offer child vaccination services. There is no variation in availability of child curative care services by facility type. However, zonal and above hospitals and private hospitals are less likely than the other facility types to offer child growth monitoring (85 percent of zonal and above hospitals, 56 percent of private hospitals), and child vaccination (85 percent of zonal and above hospitals, 31 percent of private hospitals).

Family planning services are also widely available. Practically all facilities (99 percent) report that they offer some form of temporary modern method of family planning; that is, the facility provides, prescribes, or counsels clients on any of the following temporary methods of family planning: combined oral contraceptive pills, progestin-only injectable (Depo), implant (Jadelle), intra-uterine contraceptive device (IUCD), and the male condom. Private hospitals are least likely to offer family planning services (70 percent).

Antenatal care (ANC) services are equally widely available (98 percent). Private hospitals are less likely than the other facility types to offer ANC (90 percent).

Services for sexually transmitted infections (STIs) are available in 74 percent of facilities on average, with HPs (71 percent) and UHCs (51 percent) among the least likely to offer STI services.

According to the Nepal Health Sector Strategy (NHSS), 2015-20, these services (outpatient curative care for sick children, child vaccination services, child growth monitoring services, any temporary modern method of family planning, antenatal care, and services for sexually transmitted diseases) comprise the tracer basic health care package. Overall, 63 percent of all facilities (excluding stand-alone HTC sites) provide the basic health care package as per NHSS. PHCCs (94 percent), district level hospitals (87 percent), and zonal and above hospitals (75 percent) are much more likely than other facility types, including private hospitals, to provide the basic health care package. Facilities in Hill region (70 percent) are also more likely than facilities in Mountain (53 percent) and Terai (56 percent) regions to provide the basic health care package.

Normal delivery services are available in only about half (49 percent) of facilities. Collectively, government facilities are less likely to provide normal delivery services (47 percent) compared with private facilities (64 percent). This is because only 45 percent of HPs and less than 5 percent of UHCs (these are government facilities) provide normal delivery services. At the ecological regional level, only one-third (33 percent) of facilities in Terai region provide normal delivery services compared with more than half of facilities in Mountain and Hill regions.

On average, HIV testing and counseling services are available in less than 20 percent of facilities, including stand-alone HIV testing and counseling (HTC) sites. Private hospitals (at 87 percent) are just as likely as district-level hospitals to provide HIV testing and counseling services compared with only 5 percent of HPs and 0 percent of UHCs.

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<sup>2</sup> With the exception of HIV testing and counseling services and laboratory services, stand-alone HTC sites are excluded from the analysis. Since some facilities are not expected to provide certain services, those facilities are excluded from the denominator when the particular services are analyzed. For that reason, multiple denominators are shown in Table 3.1. For example, PHCCs, HPs, and UHCs are excluded when analyzing availability of blood transfusion services

Table 3.1 Availability of basic health services

Among all facilities, the percentages offering basic health services, by background characteristics, Nepal HFS 2015

Basic health services	Facility type										Managing authority			Ecological region			Earthquake-affected districts (14)	National average													
	Zonal and above hospitals		District level hospitals		Private hospitals		PHCCs		HPs		UHCs		Stand-alone HTC		Public				Private		Mountain		Hill		Terai						
Child curative care	100.0	100.0	94.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.1	na	na	99.9	94.6	100.0	100.0	99.8	99.0	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5			
Child growth monitoring	85.1	97.4	56.3	99.0	99.6	99.6	99.6	99.6	99.6	99.6	80.4	na	na	98.7	56.3	99.1	99.1	97.1	92.1	93.9	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6			
Child vaccination	84.6	90.8	30.7	95.6	91.7	91.8	91.8	91.8	91.8	91.8	81.8	na	na	91.5	30.7	88.6	88.6	89.3	83.1	89.6	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0			
Any temporary modern FP service <sup>1</sup>	91.9	80.9	70.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	na	na	99.5	87.4	97.0	97.0	99.5	97.9	98.3	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6		
Antenatal care	100.0	96.1	90.0	100.0	98.8	96.8	96.8	96.8	96.8	96.8	96.8	na	na	98.7	90.0	100.0	100.0	99.4	95.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5		
STI services	100.0	98.7	95.0	97.6	70.7	51.0	51.0	51.0	51.0	51.0	51.0	na	na	72.0	95.0	62.3	62.3	79.5	69.5	78.0	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7		
Tracer basic client services <sup>2</sup>	75.4	86.8	24.5	93.7	65.1	33.4	33.4	33.4	33.4	33.4	33.4	na	na	65.8	24.5	53.2	53.2	69.9	55.9	68.0	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7		
Normal delivery	75.4	100.0	64.2	96.1	45.3	2.6	2.6	2.6	2.6	2.6	2.6	na	na	47.4	64.2	57.2	57.2	57.3	33.4	40.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6		
HIV treatment (ART) <sup>3</sup>	100.0	91.9	100.0	na	na	na	na	na	na	na	na	na	na	100.0	100.0	100.0	100.0	97.0	90.5	100.0	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9		
Malaria diagnosis or treatment	100.0	100.0	97.8	100.0	100.0	98.1	98.1	98.1	98.1	98.1	98.1	na	na	99.9	97.8	100.0	100.0	99.8	99.7	99.4	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	
TB diagnosis or treatment	96.6	98.7	85.4	100.0	94.0	66.9	66.9	66.9	66.9	66.9	66.9	na	na	93.4	85.4	88.5	88.5	92.8	94.3	91.9	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	
Blood transfusion <sup>4</sup>	89.1	53.9	66.0	na	na	0.0	0.0	0.0	0.0	0.0	0.0	na	na	25.9	66.0	43.3	43.3	49.7	48.0	54.9	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	
Laboratory services	100.0	100.0	99.1	86.8	13.4	8.0	8.0	8.0	8.0	8.0	8.0	94.5	94.5	18.9	97.9	13.6	13.6	19.9	40.0	22.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5		
HIV testing and counseling	100.0	86.8	87.2	46.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0	94.5	94.5	8.9	88.9	12.0	12.0	14.6	20.9	16.8	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	
Number of facilities <sup>5</sup>	6	16	70	42	775	32	23	23	23	23	32	23	23	871	92	118	118	492	353	200	963	963	963	963	963	963	963	963	963	963	
Number of facilities excluding HPs, PHCCs, and HTC <sup>6</sup>	6	16	70	0	0	32	0	0	0	0	32	0	0	53	70	6	6	59	58	37	123	123	123	123	123	123	123	123	123	123	123
Number of facilities excluding HTC <sup>7</sup>	6	16	70	42	775	32	0	0	0	0	32	0	0	871	70	118	118	482	340	195	940	940	940	940	940	940	940	940	940	940	940
Number of designated ART facilities <sup>8</sup>	4	8	1	0	0	0	0	0	0	0	0	0	0	12	1	1	1	7	4	3	12	12	12	12	12	12	12	12	12	12	12
Number of facilities excluding HTC, Sukra Raj and Bir hospitals <sup>9</sup>	6	16	70	42	775	32	0	0	0	0	32	0	0	870	70	118	118	482	340	194	940	940	940	940	940	940	940	940	940	940	940
Number of facilities excluding HTC and Sukra Raj hospital <sup>10</sup>	6	16	70	42	775	32	0	0	0	0	32	0	0	871	70	118	118	482	340	195	940	940	940	940	940	940	940	940	940	940	940
Number of facilities excluding HTC, Sukra Raj and Kanti hospitals <sup>11</sup>	6	19	70	42	775	32	0	0	0	0	32	0	0	874	70	122	122	482	340	194	944	944	944	944	944	944	944	944	944	944	944

Note: Except for laboratory services and HIV testing and counseling (HTC) services, facility type Stand-alone HTC is excluded from analysis for all other services.

<sup>1</sup> Facility provides, prescribes, or counsels clients on any of the following temporary methods of family planning: combined oral contraceptive pills, progestin-only injectable (Depo), implant (Jadelle), intrauterine contraceptive device (IUCDs), or male condom.

<sup>2</sup> Tracer basic client services as per NHSS basic health care package include outpatient curative care for sick children either at the facility or as outreach, child growth monitoring either at the facility or as outreach, child vaccination services either at the facility or as outreach, and any temporary modern method of family planning, antenatal care, and services for sexually transmitted infections (STIs).

<sup>3</sup> This indicator is assessed in ART-designated facilities only.

<sup>4</sup> This excludes HP, PHCCs, and stand-alone HTC.

<sup>5</sup> This denominator applies only to the indicators "laboratory services" and "HIV testing and counseling (HTC) services."

<sup>6</sup> This denominator applies only to the indicator "blood transfusion."

<sup>7</sup> This denominator applies only to the indicators "normal delivery," "STI services," "malaria diagnosis or treatment," and "TB diagnosis or treatment."

<sup>8</sup> This denominator applies only to the indicator "HIV treatment (ART)."

<sup>9</sup> This denominator applies only to the indicators "child curative care," "child vaccination," and "antenatal care."

<sup>10</sup> This denominator applies only to the indicator "child growth monitoring."

<sup>11</sup> This denominator applies only to the indicator "family planning."

Availability of health services by ecological region does not follow any particular pattern. Facilities in Terai region are less likely than those in Hill and Mountain regions to provide child growth monitoring and child vaccination services, whereas facilities in Mountain region are less likely than those in Hill and Terai regions to provide sexually transmitted infection (STI), tuberculosis (TB), and blood transfusion services.

Collectively, the 14 earthquake-affected districts are not very different when compared with national level estimates for availability of client services.

### **3.2 Availability of Basic Amenities for Client Services**

The survey collected information to assess general readiness of health facilities to provide quality health services. It is acknowledged that the components presented here are neither necessary nor sufficient to provide quality services; however, the availability of basic amenities and infrastructure such as regular electricity, a supply of improved water, privacy during consultation, a client latrine, and Internet access are important to clients' satisfaction with health services rendered at a facility. Table 3.2 presents information on availability of these basic amenities for client services.

On average, only half of all facilities (50 percent) have regular electricity. At 96 percent and above, hospitals of any kind are more likely to have regular electricity compared with PHCCs (78 percent) and stand-alone HTC sites (72 percent). HPs and UHCs (at 43 percent and 24 percent, respectively) are least likely to have regular electricity. Private facilities are almost twice as likely as government facilities to have regular electricity. Facilities in Mountain and Hill regions (69 percent and 53 percent, respectively) are more likely than those in Terai region (38 percent) to have regular electricity.

Overall, about 8 in 10 facilities have an improved water source; availability ranges from 75 percent of UHCs to 97 percent of zonal and above hospitals. Facilities in Terai region (at 94 percent), are more likely than those in other regions to have an improved water source in their facilities. Collectively, the 14 earthquake-affected districts are just as likely as others to have an improved water source (78 percent vs. 81 percent).

A functioning latrine in the general outpatient area for client use is available on average in 8 out of 10 facilities. Hospitals, PHCCs, and stand-alone HTC sites are above average in terms of availability, with more than 90 percent having a client latrine. While 80 percent of public facilities have a client latrine, practically all private facilities do. There is little difference by ecological region.

Communication equipment (land-line telephone or mobile telephone) and computer with Internet are less widely available compared with the other amenities. For example, only 1 in 5 facilities has communication equipment; however, availability ranges from 8 percent of HPs to close to 90 percent and above of hospitals. Just about 4 in 10 PHCCs have communication equipment. Private facilities are far more likely to have communication equipment than public facilities. Availability of a computer with Internet access follows a pattern similar in availability of communication equipment.

About 6 in every 10 facilities have transport for emergencies (i.e., 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, or else the facility has access to an ambulance or other vehicle stationed at, or operating from, another facility). Over 90 percent of hospitals have transport for emergencies. By managing authority, private facilities are more likely than public facilities to have emergency transport. Compared to Hill and Terai regions, facilities in Mountain region are least likely to have emergency transport.

Table 3.2 Availability of basic amenities for client services

Among all facilities, the percentages with indicated amenities considered basic for quality services, by background characteristics, Nepal HFS 2015

Background characteristics	Amenities							Number of facilities
	Regular electricity <sup>1</sup>	Improved water source <sup>2</sup>	Visual and auditory privacy <sup>3</sup>	Client latrine <sup>4</sup>	Communication equipment <sup>5</sup>	Computer with Internet <sup>6</sup>	Emergency transport <sup>7</sup>	
<b>Facility type</b>								
Zonal and above hospitals	100.0	96.6	86.1	93.2	100.0	89.8	93.2	6
District level hospitals	96.1	93.4	89.5	96.1	88.2	76.3	93.4	16
Private hospitals	99.4	89.4	95.7	98.4	98.5	78.7	94.5	70
PHCCs	77.7	94.2	93.2	94.7	41.2	36.4	74.8	42
HPs	42.5	79.0	76.2	78.8	8.2	0.4	54.2	775
UHCs	23.7	75.1	58.4	79.9	14.4	0.0	59.3	32
Stand-alone HTC	72.3	94.0	99.1	90.9	88.2	81.3	67.4	23
<b>Managing authority</b>								
Public	44.9	80.0	76.7	80.0	12.1	4.2	56.4	871
Private	92.8	90.5	96.6	96.6	96.0	79.4	87.9	92
<b>Ecological region</b>								
Mountain	68.5	72.0	81.9	78.4	10.1	3.8	40.7	118
Hill	53.2	73.9	76.5	84.1	20.5	10.4	56.2	492
Terai	38.0	94.0	80.5	79.2	23.1	15.2	70.2	353
<b>Earthquake-affected districts (14)</b>	46.3	77.6	70.0	85.1	25.0	14.0	67.7	200
National average	49.5	81.0	78.6	81.6	20.2	11.4	59.4	963

<sup>1</sup> Facility is connected to a central power grid, and there has not been an 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 or inverter.

<sup>2</sup> Water is piped into facility or piped onto facility grounds, or bottled water, or else water from a public tap or standpipe, a tube well or borehole, a protected dug well, protected spring, or rain 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 had a functioning flush or pour-flush toilet, a ventilated improved pit latrine, or composting toilet.

<sup>5</sup> The facility had 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 had 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 had 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, 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.

### 3.3 Availability of Key Commodities

Table 3.3 presents findings on availability of key commodities to support the provision of quality services to clients on the day of the survey.

Over 90 percent of facilities had at least three temporary modern methods of family planning available in the facility on the day of the survey. Private hospitals were least likely to have family planning commodities available; this is not surprising since they (private hospitals) are also the least likely to offer family planning services (see Table 3.1) and therefore not expected to carry these commodities. The majority of the other commodities (ORS, co-trimoxazole tablets, iron and folic acid combination tablets, zinc tablets, albendazole, and vitamin A) were also widely available (over 90 percent of all facilities). Interestingly, however, for all of these key commodities, zonal level and private hospitals were less likely than the other facility types to have them available in the facility on the day of the survey. For example, only 44 percent of zonal and above hospitals and 47 percent of private hospitals had co-trimoxazole tablets available in the facility on the day of the survey; the national average, however, was 92 percent.

Gentamycin injection (64 percent), co-trimoxazole suspension (49 percent), and amoxicillin syrup/suspension/dispersible pediatric-dosed tablets (24 percent) were less widely available compared with the other commodities. PHCCs, HPs, and UHCs were less likely than hospitals to have pediatric amoxicillin. However, for co-trimoxazole suspension, private hospitals (23 percent), UHCs (36 percent), and zonal and above hospitals (38 percent) were among the least likely to have the medicine.

Table 3.3 Availability of key commodities

Among all facilities, the percentages with indicated key health commodities, by background characteristics, Nepal HFS 2015

Background characteristics	Commodities										Number of facilities
	At least 3 temporary modern FP methods <sup>1</sup>	ORS	Co-trimoxazole tablets	Co-trimoxazole suspension	Amoxicillin syrup suspension or dispersible pediatric-dosed tablet	Gentamycin injection	Iron and folic acid combination tablet	Zinc	Albendazole	Vitamin A	
<b>Facility type</b>											
Zonal and above hospitals	78.8	79.5	44.4	37.8	41.3	75.4	79.2	62.4	93.2	48.1	6
District-level hospitals	98.7	94.7	93.4	63.2	46.1	86.8	90.8	93.4	100.0	88.2	16
Private hospitals	54.5	77.8	46.7	23.1	57.4	64.4	67.9	61.3	75.7	41.0	70
PHCCs	99.0	91.8	93.2	52.8	22.8	83.0	93.2	99.0	100.0	93.7	42
HPs	97.0	93.8	96.2	51.2	20.6	63.2	92.3	99.1	99.0	94.1	775
UHCs	93.6	86.5	88.0	36.3	28.5	32.0	97.8	81.5	100.0	79.4	32
<b>Managing authority</b>											
Public	96.9	93.3	95.3	50.9	21.6	63.5	92.4	98.1	99.1	93.1	871
Private	54.5	77.8	46.7	23.1	57.4	64.4	67.9	61.3	75.7	41.0	70
<b>Ecological region</b>											
Mountain	97.4	96.3	87.1	49.2	33.4	68.4	96.6	97.5	98.4	91.0	118
Hill	94.8	94.8	93.3	53.3	25.5	63.8	95.5	95.9	98.1	91.5	482
Terai	91.1	87.1	91.1	42.4	19.3	61.5	81.6	93.9	96.0	85.6	340
<b>Earthquake-affected districts (14)</b>											
Earthquake-affected districts (14)	95.5	94.5	85.6	48.2	40.4	44.8	94.5	92.8	96.1	89.9	195
National average	93.7	92.2	91.7	48.8	24.2	63.6	90.6	95.4	97.4	89.3	940

Note: Stand-alone HTC facilities are excluded from this table.

<sup>1</sup> Any three of the following methods observed to be available in the facility on the day of the survey: combined oral contraceptive pills, progestin-only injectable, male condom, IUCD, or implant.



## **4 CHILD HEALTH SERVICES**

### **4.1 Availability of Child Health Services**

The 2015 NHFS assessed the availability of child health services in all facilities. However, stand-alone HTC's are excluded from analysis for child health services. As shown in Table 4.1, outpatient curative care for sick children is universally available. Child growth monitoring services are also widely available, except for private hospitals, of which only a little over half (56 percent) provide child growth monitoring services. Zonal and above hospitals and UHCs (each at around 80 percent) are slightly less likely than other government facilities to provide growth monitoring services. Availability of growth monitoring services ranges from 92 percent of facilities in Terai to 99 percent of facilities in Mountain region. Availability of child curative care and child growth monitoring services in the 14 earthquake-affected districts compares favorably with the national averages.

Compared with child curative care, child vaccinations are not as widely available; however, 87 percent of facilities provide child vaccination services, i.e., pentavalent, polio, measles-rubella (MR), and bacillus Calmette-Guérin (BCG) vaccination services either at the facility or as outreach services. Private hospitals, at 31 percent, are much less likely than government facilities to provide child vaccination services, thereby lowering the national average.

Overall, 86 percent of facilities provide all three basic child health services (i.e., growth monitoring, vaccination, and curative care for sick children). Private hospitals (28 percent) are less likely to do so than government facilities, ranging from 75 percent of UHCs to 95 percent of PHCCs.

The 2015 NHFS also assessed the provision of pneumococcal conjugate vaccine (PCV) and Japanese encephalitis (JE) vaccination. When considered altogether, only 24 percent of facilities provide the complete package of vaccines, that is, pentavalent, polio, MR, BCG, PCV, and JE vaccinations.

Vitamin A supplementation services are widely available in Nepal; availability ranges from 65 percent of zonal and above hospitals to 99 percent of PHCCs and HPs.

Table 4.1 Availability of child health services

Among all facilities, the percentages offering specific child health services either at the facility or as outreach, by background characteristics, Nepal HFS 2015

Background characteristics	Percentage of facilities that offer:							Number of facilities	Number of facilities excluding Sukra Raj and Bir hospitals	Number of facilities excluding Sukra Raj hospital
	Outpatient curative care for sick children	Growth monitoring	Child vaccination <sup>1</sup>	All three basic child health services	Child vaccination+ <sup>2</sup>	Child health services with all vaccinations <sup>3</sup>	Routine vitamin A supplementation			
<b>Facility type</b>										
Zonal and above hospitals	100.0	85.1	84.6	78.8	34.4	34.4	65.2	6	6	6
District level hospitals	100.0	97.4	90.8	90.8	27.6	27.6	94.7	16	16	16
Private hospitals	94.6	56.3	30.7	27.5	12.3	11.1	44.9	70	70	70
PHCCs	100.0	99.0	95.6	95.2	26.7	26.7	99.0	42	42	42
HPs	100.0	99.6	91.7	91.3	24.8	24.4	98.8	775	775	775
UHCs	98.1	80.4	81.8	75.2	26.1	22.8	94.6	32	32	32
<b>Managing authority</b>										
Public	99.9	98.7	91.5	90.8	25.1	24.6	98.3	871	870	871
Private	94.6	56.3	30.7	27.5	12.3	11.1	44.9	70	70	70
<b>Ecological region</b>										
Mountain	100.0	99.1	88.6	88.4	10.1	10.1	97.7	118	118	118
Hill	99.8	97.1	89.3	88.7	13.9	13.7	95.5	482	482	482
Terai	99.0	92.1	83.1	81.5	43.4	42.2	91.6	340	340	340
<b>Earthquake-affected districts (14)</b>	99.4	93.9	89.6	88.1	10.9	10.4	92.4	195	194	195
National average	99.5	95.6	87.0	86.1	24.1	23.6	94.4	940	940	940

Note: Stand-alone HTC facilities are excluded from this table.

Note: Sukra Raj and Bir hospitals are excluded from this table for analysis of child curative care and child vaccination services.

Note: Sukra Raj hospital is excluded from this table for analysis of growth monitoring services.

Note: BCG = Bacillus Calmette-Guérin.

Note: Outpatient curative care for sick children and growth monitoring include services in the facility or as outreach.

<sup>1</sup> Routine provision of pentavalent, polio, measles-rubella (MR), and BCG vaccinations, either at the facility or as outreach.

<sup>2</sup> Routine provision of pentavalent, polio, measles-rubella (MR), BCG, pneumococcal (PCV), and Japanese encephalitis vaccinations, either at the facility or as outreach.

<sup>3</sup> Includes provision of outpatient curative care for sick children, growth monitoring, and all six child vaccinations, either at the facility or as outreach.

## **4.2 Guidelines, Trained Staff, and Equipment for Child Curative Care Services**

The availability of treatment guidelines for easy reference contributes to the overall quality of services that clients receive. Trained staff and basic equipment are also necessary to assess and examine sick children properly. Table 4.2 shows, among facilities that offer outpatient curative care for sick children, the percentages with (1) Integrated Management of Neonatal and Childhood Illness (IMNCI) and growth monitoring guidelines, (2) staff who have received recent in-service training, and (3) basic equipment for client assessment and examination.

About half of facilities had IMNCI guidelines; slightly less (45 percent) had guidelines on growth monitoring. In both cases, fewer than 5 percent of private hospitals had these guidelines. PHCCs and HPs are more likely than other facility types to have these guidelines.

A facility is considered to have trained staff if at least one interviewed provider of child curative care services reported that they received in-service training related to child health in the 24 months preceding the survey. Overall, only about 1 in 5 facilities (22 percent) have staff with recent training in IMNCI, and 1 in 4 (24 percent) have staff trained in growth monitoring.

Some equipment for curative care services are more widely available than other types. For example, an infant scale (64 percent), a thermometer (95 percent), a stethoscope (98 percent) and a timer (94 percent) are much more likely to be available than a length/height board (24 percent) and child scale (45 percent). About three in four facilities had a growth monitoring chart (HMIS 2.1) available.

Table 4.2 Guidelines, trained staff, and equipment for child curative care services

Among all facilities offering outpatient curative care for sick children, the percentages having indicated guidelines, trained staff, and equipment, by background characteristics, Nepal HFS 2015

Background characteristics	Guidelines		Trained staff				Equipment					Number of facilities offering outpatient curative care for sick children
	IMNCI	Growth monitoring	IMNCI <sup>1</sup>	Growth monitoring <sup>2</sup>	Child scale <sup>3</sup>	Infant scale <sup>4</sup>	Length or height board	Thermo-meter	Stetho-scope	Growth chart (HMIS 2.1)	Timer	
<b>Facility type</b>												
Zonal and above hospitals	17.7	24.8	14.1	10.6	38.9	63.7	85.9	96.5	100.0	60.1	81.6	6
District level hospitals	40.8	35.5	42.1	34.2	56.6	77.6	51.3	100.0	100.0	73.7	97.4	16
Private hospitals	3.3	2.6	3.5	5.2	30.7	56.4	45.2	99.7	100.0	17.6	88.7	66
PHCCs	58.2	42.2	37.3	33.9	49.0	65.9	53.9	97.6	99.5	81.9	97.1	42
HPs	55.4	50.1	22.6	25.6	47.0	64.8	20.4	94.2	98.1	81.2	94.3	775
UHCs	16.9	20.4	13.7	12.1	27.8	39.0	8.5	97.4	100.0	65.5	94.9	31
<b>Managing authority</b>												
Public	53.7	48.2	23.3	25.6	46.5	64.1	22.6	94.6	98.3	80.4	94.4	870
Private	3.3	2.6	3.5	5.2	30.7	56.4	45.2	99.7	100.0	17.6	88.7	66
<b>Ecological region</b>												
Mountain	49.8	42.9	16.8	17.9	55.6	53.8	19.1	95.3	98.0	82.3	97.6	118
Hill	50.7	46.5	22.6	22.8	48.4	69.7	23.1	97.0	99.4	78.2	94.2	481
Terai	49.4	43.6	22.7	28.2	37.6	58.4	27.5	91.9	97.1	70.6	92.6	337
<b>Earthquake affected districts (14)</b>	43.2	34.2	29.8	21.3	39.1	64.8	28.2	100.0	100.0	74.8	98.6	193
National average	50.1	45.0	21.9	24.1	45.4	63.6	24.2	95.0	98.4	76.0	94.0	936

Note: Stand-alone HTC facilities are excluded from this table.

Note: Outpatient curative care services for sick children includes services in the facility or as outreach.

<sup>1</sup> At least one interviewed provider of child health services in the facility reported receiving in-service training in Integrated Management of Neonatal and Childhood Illness (IMNCI) during the 24 months preceding the survey. Training refers only to in-service training. The training must have involved structured sessions; it does not include individual instruction that a provider might have received during routine supervision.

<sup>2</sup> At least one interviewed provider of child health services in the facility reported receiving in-service training in growth monitoring during the 24 months preceding the survey. Training refers only to in-service training. The training must have involved structured sessions; it does not include individual instruction that a provider might have received during routine supervision.

<sup>3</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>4</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.

## **5 FAMILY PLANNING SERVICES**

### **5.1 Availability of Family Planning Services**

The 2015 NHFS obtained information on availability of family planning services from all sampled facilities. However, stand-alone HTC sites, Sukra Raj and Kanti hospitals, are excluded from analysis of family planning services as these facilities, by their scope of work, are not meant to provide them. Table 5.1 provides information on the availability of family planning services. The 2015 NHFS considers a facility to be offering family planning services if health care providers in the facility provide the method (that is, stock the commodity for clients in the facility), prescribe the method (for clients to obtain elsewhere outside the facility), or counsel clients on any modern family planning methods.

#### *Temporary Methods of Family Planning*

Survey findings show that the male condom, the combined oral contraceptive pills, and the progestin-only injectable (Depo) are the most widely offered temporary methods of family planning in health facilities. On average, each method is available in 96 percent or more of facilities (Table 5.1). With the exception of private hospitals, where between 65 percent and 67 percent offer each of these temporary methods, each method is available in almost all types of government facilities. Among the various government facilities, zonal and above hospitals are slightly less likely than the other facility types to offer the male condom, the progestin-only injectable, or the oral contraceptive pill. Even so, these methods are available in 81 to 88 percent of zonal and above hospitals.

Facilities are less likely to offer the long-acting methods of intrauterine contraceptive device (IUCD) and implant than they are to offer other temporary methods; 49 percent and 48 percent of facilities offer the IUCD and implant, respectively. Here also, private hospitals, as well as HPs and UHCs are less likely than PHCCs, district, and zonal and above hospitals to offer the IUCD or implant.

On average, 95 percent of facilities offer all three short-acting temporary methods of the male condom, combined oral contraceptive pills, and progestin-only injectable (Depo); by contrast, only 43 percent offer all five temporary methods, that is, the male condom, combined oral contraceptive pills, progestin-only injectable (Depo), IUCD, and implant (Table 5.1)

#### *Permanent Methods of Family Planning*

PHCCs, HPs, and UHCs are excluded from analysis of permanent methods of family planning; that is, only hospitals are analyzed for permanent methods. Close to half of hospitals (zonal and above, district-level, and private) offer male or female sterilization. Health care providers in these facilities can actually perform the procedure at the facility, or else they discuss this option with clients and then refer them elsewhere to obtain the service. Government hospitals (zonal and above, and district-level) are more likely than private hospitals to offer male or female sterilization.

Table 5.1 Availability of family planning services

Among all facilities, the percentages offering temporary modern methods of family planning, male or female sterilization, and three and five temporary modern methods of family planning, by background characteristics, Nepal HFS 2015

Background characteristics	Temporary methods of family planning (FP)						Male sterilization <sup>1</sup>	Female sterilization <sup>2</sup>	Three temporary modern FP methods <sup>3</sup>	Five temporary modern FP methods <sup>4</sup>	Number of facilities	Number of facilities excluding PHCC, HP, and UHC
	Male condom	Progestin-only injectable (Depo)	Combined oral contraceptive pills	Implant (Jadelle)	IUCD							
<b>Facility type</b>												
Zonal and above hospitals	88.3	80.9	84.6	77.0	88.3	69.9	73.6	77.3	66.0	6	6	
District-level hospitals	100.0	96.1	98.7	96.1	97.4	72.4	68.4	94.7	90.8	16	16	
Private hospitals	64.8	66.2	66.5	45.6	53.8	40.0	40.7	61.1	43.7	70	70	
PHCCs	100.0	99.5	99.5	84.5	90.3	na	na	99.0	81.6	42	0	
HPs	100.0	98.5	99.3	45.0	45.2	na	na	97.8	39.6	775	0	
UHCs	98.1	98.1	100.0	35.3	37.5	na	na	98.1	33.4	32	0	
<b>Managing authority</b>												
Public	99.9	98.4	99.2	47.7	48.3	71.7	69.8	97.6	42.6	870	21	
Private	64.8	66.2	66.5	45.6	53.8	40.0	40.7	61.1	43.7	70	70	
<b>Ecological region</b>												
Mountain	100.0	99.7	99.8	53.1	46.1	57.7	53.8	99.7	44.6	118	5	
Hill	98.4	95.9	97.5	46.0	48.4	58.3	58.9	95.0	41.0	482	43	
Terai	94.7	94.8	94.6	47.7	50.1	34.9	34.9	93.2	44.2	340	42	
<b>Earthquake-affected districts (14)</b>	96.4	94.0	95.9	41.1	46.3	48.0	51.4	93.3	39.7	194	26	
National average	97.3	96.0	96.8	47.5	48.7	47.4	47.5	94.9	42.6	940	91	

Note: Stand-alone HTC facilities, Sukra Raj and Kanti hospitals are excluded from this table.

Note: Male sterilization and female sterilization are not provided in PHCCs, HPs, and UHC.

<sup>1</sup> Providers in the facility perform male sterilization or counsel clients on male sterilization.

<sup>2</sup> Providers in the facility perform female sterilization or counsel clients on female sterilization.

<sup>3</sup> Facility provides, prescribes, or counsels clients on the following three temporary modern methods: progestin-only injectable (Depo), male condoms, and combined oral contraceptive pills.

<sup>4</sup> Facility provides, prescribes, or counsels clients on the following five temporary modern methods: progestin-only injectable (Depo), male condoms, combined oral contraceptive pills, IUCD, and implant (Jadelle).

## 5.2 Availability of Family Planning Commodities

Among facilities reporting that they provided various family planning methods (i.e., stock the method in the facility and make the method available to clients in the facility), the 2015 NHFS assessed the availability (physical presence) of those commodities at the facility on the day of the survey. Table 5.2 provides details on availability on the day of the survey. For example, among the facilities that report that they provide the IUCD, 90 percent had the IUCD on the day of the survey. In other words, 10 percent of those facilities that provide the IUCD were experiencing a stock out on the day of the survey. Availability of the implant is similar to availability of the IUCD, that is, about 9 in 10 facilities that provide the implant actually had one available on the day of the survey. In other words, 1 in 10 were experiencing a stock out of implants on the day of the survey. Interestingly, stock out of implants was more common in zonal and above hospitals compared with the other facility types. Specifically, only about three in four zonal and above hospitals that stock implants actually had them available on the day of the survey.

Availability of short-acting methods is better, as practically all the facilities that report that they provide (stock) the combined oral contraceptive pill, the male condom, or the progestin-only injectable actually had these methods available on the day of the survey. Overall, 95 percent of facilities had all the methods that they provide available on the day of the survey.

Table 5.2 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, Nepal HFS 2015

Method	Male condom	Progestin-only injectable (Depo)	Combined oral contraceptive pills	Implant (Jadelle)	IUCD <sup>2</sup>	Every method provided by facility was available on day of survey
<b>Facility type</b>						
Zonal and above hospitals	100.0	100.0	100.0	76.2	91.7	79.2
District level hospitals	98.7	98.6	98.6	88.7	91.9	88.2
Private hospitals	99.3	98.7	98.5	88.2	98.8	93.5
PHCCs	98.5	98.5	99.0	86.8	95.0	84.9
HPs	99.7	99.0	99.5	92.3	86.7	95.7
UHCs	95.5	100.0	100.0	100.0	100.0	95.5
<b>Managing authority</b>						
Public	99.5	99.0	99.5	90.6	89.1	94.9
Private	99.3	98.7	98.5	88.2	98.8	93.5
<b>Ecological region</b>						
Mountain	99.8	97.7	98.7	87.7	84.2	94.1
Hill	99.4	99.5	99.7	93.6	96.0	96.7
Terai	99.4	98.8	99.5	86.8	82.8	92.3
<b>Earthquake-affected districts (14)</b>						
	99.9	99.9	99.9	90.3	98.8	97.9
National average	99.5	99.0	99.5	90.5	90.0	94.8

Note: Stand-alone HTC facilities, Sukra Raj and Kanti hospitals, are excluded from this table.

Note: The denominators for each commodity/method differ and are not shown in the table.

Note: Each commodity/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/methods was valid, that is, 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.

<sup>2</sup> IUCD = Intrauterine Contraceptive Device

### 5.3 Guidelines and Basic Equipment for Family Planning Services

To ensure that family planning clients receive the best possible services when they visit a family planning service delivery point, a certain infrastructure and resources need to be in place. These include service guidelines, trained staff, and some basic equipment. Table 5.3 provides information on availability of service guidelines and basic equipment at the family planning service site.

Overall, only 4 in 10 facilities that offer modern family planning services had the National Medical Standard (NMS), Volume I, available at the service delivery site on the day of the survey. Zonal and above hospitals, at 63 percent, were more likely than other facility types to have this guideline, compared with private hospitals (14 percent) and UHCs (16 percent). There is not much variation among the regions; however, facilities in Mountain region are less likely to have the guideline. Similarly, facilities in the 14 earthquake-affected districts are slightly less likely than the general population of facilities to have the guideline (31 percent vs. 40 percent).

Equipment availability varies. For example, while 88 percent of facilities that offer family planning services had a blood pressure apparatus at the service site on the day of the survey visit, and about 84 percent had an examination bed, other equipment and supplies were not widely available. Less than half (45 percent) of family planning facilities had an examination light, ranging from 41 percent of HPs to 79 percent of private and zonal and above hospitals. Only 3 in 10 family planning facilities had samples of family planning methods for use in counselling. A pelvic model for an IUCD and a model for showing condom use were not widely available; they were found in only 7 percent and 10 percent of facilities, respectively. Even among hospitals that are most likely to provide IUCD, only 25 percent of zonal and above hospitals, and 17 percent of district-level hospitals had pelvic models for IUCD. On a more positive note, about 6 in 10 family planning facilities had other family planning specific visual aids, that is, flip charts or family planning-specific leaflets.

Table 5.3 Guidelines and basic equipment for family planning services

Among facilities offering any modern family planning methods, the percentage having family planning guidelines and the percentage with the indicated equipment observed to be available on the day of the survey, by background characteristics, Nepal HFS 2015

Background characteristics	Percentage of facilities offering any modern family planning and having:									Number of facilities offering any modern family planning methods
	Equipment									
	National Medical Standard Vol. I	Blood pressure apparatus <sup>2</sup>	Examination light	Examination bed or table	Samples of FP methods	Pelvic model for IUCD <sup>3</sup>	Model for showing condom use	Goose lamp	Other family planning-specific visual aid <sup>4</sup>	
<b>Facility type</b>										
Zonal and above hospitals	62.6	100.0	79.2	95.8	58.1	24.9	45.7	37.7	75.1	5
District level hospitals	46.1	96.1	57.9	97.4	59.2	17.1	27.6	25.0	85.5	16
Private hospitals	14.3	89.3	79.4	97.3	13.1	5.7	7.2	21.6	24.3	49
PHCCs	42.7	91.3	49.1	97.6	50.5	7.3	22.3	13.6	75.3	42
HPs	42.5	87.2	41.3	81.8	29.3	6.0	9.2	4.0	61.8	775
UHCs	15.5	93.3	58.8	90.6	10.1	13.9	2.3	0.0	43.3	32
<b>Managing authority</b>										
Public	41.7	87.9	42.9	83.3	30.3	6.7	10.1	4.9	62.3	870
Private	14.3	89.3	79.4	97.3	13.1	5.7	7.2	21.6	24.3	49
<b>Ecological region</b>										
Mountain	32.9	90.9	45.5	80.3	45.8	4.5	6.0	14.1	62.5	118
Hill	42.9	87.8	51.2	83.6	26.3	7.3	11.7	5.2	59.8	474
Terai	38.9	87.2	35.2	85.9	27.9	6.4	8.8	3.6	60.2	326
<b>Earthquake-affected districts (14)</b>	30.9	88.5	51.3	83.3	24.5	6.7	7.8	8.1	43.1	188
National average	40.2	88.0	44.8	84.0	29.4	6.6	9.9	5.8	60.3	919

Note: Stand-alone HTC facilities, Sukra Raj and Kanti hospitals, are excluded from this table.

<sup>1</sup> National guidelines on family planning (Nepal Medical Standard Contraceptive Services Volume I) or other job aid on family planning

<sup>2</sup> A functioning digital blood pressure apparatus or else a manual sphygmomanometer with a stethoscope

<sup>3</sup> IUCD = intrauterine contraceptive device

<sup>4</sup> Flip charts or leaflets

## 5.4 Trained Staff for Family Planning Services

Table 5.4 presents findings on availability of trained staff in surveyed facilities. A facility is considered as having trained staff if at least one interviewed provider of family planning services reports that they received family planning-related training during the 24 months preceding the survey. About 7 in 10 family planning facilities had at least one interviewed family planning provider who had recently received the Comprehensive Family Planning and Counseling (CoFP/C) training. Other trainings were less commonly reported; for example, only 15 percent and 12 percent of family planning facilities can be considered as having staff trained in use of the implant and IUCD, respectively. Other trainings are even less often reported, such as training in use of the postpartum IUCD.



Table 5.4 Trained staff for family planning services

Among facilities offering any modern family planning methods, the percentage having at least one staff member recently trained on family planning service delivery, by background characteristics, Nepal HFS 2015

Background characteristics	Facilities offering any modern family planning that have at least one staff trained in indicated family planning topics						Number of facilities offering any modern family planning methods
	CoFP/C <sup>1</sup>	Implant	IUCD <sup>2</sup>	NSV <sup>3</sup>	Minilap	PPIUCD <sup>4</sup>	
<b>Facility type</b>							
Zonal and above hospitals	75.1	4.2	16.6	0.0	0.0	4.2	5
District-level hospitals	72.4	10.5	9.2	3.9	3.9	0.0	16
Private hospitals	68.3	18.3	8.5	0.8	0.4	3.6	49
PHCCs	60.1	16.0	17.1	2.4	2.9	1.5	42
HPs	71.5	14.3	11.6	0.0	0.2	2.5	775
UHCs	69.6	16.1	10.5	0.0	0.0	3.9	32
<b>Managing authority</b>							
Public	70.9	14.3	11.8	0.2	0.4	2.5	870
Private	68.3	18.3	8.5	0.8	0.4	3.6	49
<b>Ecological region</b>							
Mountain	71.3	17.3	8.6	0.2	1.4	1.2	118
Hill	68.9	18.6	11.0	0.4	0.3	0.8	474
Terai	73.3	7.5	13.8	0.0	0.1	5.4	326
<b>Earthquake-affected districts (14)</b>	72.9	16.8	9.0	0.2	0.0	1.1	188
National average	70.7	14.5	11.7	0.2	0.4	2.5	919

Note: Stand-alone HTC facilities, Sukra Raj and Kanti hospitals, are excluded from this table.

<sup>1</sup> CoFP/C = Comprehensive Family Planning and Counseling

<sup>2</sup> IUCD = intrauterine contraceptive device.

<sup>3</sup> NSV = Non-Scalpel Vasectomy.

<sup>4</sup> PPIUCD = Post-partum intrauterine contraceptive device.



## 6 MATERNAL AND NEWBORN HEALTH SERVICES

### 6.1 Availability of Antenatal Care Services

Antenatal care is the gateway to many of the critical maternal, newborn, and child health care services. Table 6.1 presents information on the availability of antenatal care (ANC) services, as well as information on how often these services are offered. Stand-alone HTC sites, Sukra Raj and Kanti hospitals, are excluded from analysis of ANC services.

Almost all facilities in Nepal (98 percent) offer ANC services. Private hospitals, even though 90 percent of them offer ANC services, are the facility least likely to do so.

In general, a large proportion of health facilities that offer ANC services do so 4 or more days a week (85 percent). Slightly over 6 in 10 district- and zonal-level hospitals offer ANC services 4 or more days a week. Among PHCCs that offer ANC, 8 in 10 do so 4 or more days a week. Facilities in the ecological region of Terai, at 76 percent, are less likely than facilities in Mountain (92 percent) and Hill (90 percent) to offer ANC 4 or more days per week.

**Table 6.1 Availability of antenatal care services**

Among all facilities, the percentage offering antenatal care (ANC) services and, among facilities offering ANC services, the percentages offering the service on the indicated number of days per week, by background characteristics, Nepal HFS 2015

Background characteristics	Percentage of facilities that offer ANC	Number of facilities	Percentage of facilities offering ANC where ANC services are offered the indicated number of days per week <sup>1</sup>		Number of facilities offering ANC
			1-3 days per week	4 or more days per week	
<b>Facility type</b>					
Zonal and above hospitals	100.0	6	36.7	63.3	6
District level hospitals	96.1	16	34.2	64.4	15
Private hospitals	90.0	70	3.8	92.2	63
PHCCs	100.0	42	19.9	78.7	42
HPs	98.8	775	12.1	84.8	765
UHCs	96.8	32	0.0	100.0	31
<b>Managing authority</b>					
Public	98.7	870	12.6	84.6	859
Private	90.0	70	3.8	92.2	63
<b>Ecological region</b>					
Mountain	100.0	118	5.6	91.7	118
Hill	99.4	482	7.7	89.6	479
Terai	95.5	340	20.6	76.0	325
<b>Earthquake-affected districts (14)</b>	99.5	194	6.6	92.6	193
National average	98.1	940	12.0	85.1	922

Note: Stand-alone HTC facilities are excluded from this table.

Note: Sukra Raj and Kanti Children hospitals are excluded from analysis for ANC services.

<sup>1</sup> Some facilities offer ANC services less often than 1 day per week, so the total percentage may be less than 100 percent.

### 6.2 Infection Control

Infection control is vital to the overall provision of quality services. Table 6.2 presents information on the availability of items for infection control at ANC service sites. Overall, only half (53 percent) of ANC facilities had soap and running water or else alcohol-based hand disinfectant at the ANC service site on the day of the visit. These items for infection control were more likely to be available in zonal and above hospitals (96 percent) than in any other facility type. HPs and UHCs that offer ANC are at the lower end of the spectrum, with barely half of these facilities having these items available.

Table 6.2 Items for infection control during provision of antenatal care

Among facilities offering 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, Nepal HFS 2015

Background characteristics	Percentage of facilities offering ANC that have items for infection control										Number of facilities offering ANC
	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>	Chlorine for disinfection	All infection prevention items <sup>4</sup>	
<b>Facility type</b>											
Zonal and above hospitals	80.9	84.6	80.9	59.7	96.3	96.3	73.3	3.7	69.9	3.7	6
District-level hospitals	75.3	72.6	68.5	42.5	79.5	87.7	95.9	15.1	74.0	12.3	15
Private hospitals	77.0	78.1	76.0	42.8	83.0	86.0	48.5	17.6	61.6	12.3	63
PHCCs	72.8	73.8	69.0	24.7	73.8	80.6	90.3	11.2	58.7	7.8	42
HPs	51.2	45.0	39.9	23.1	49.0	84.5	87.3	5.6	67.8	3.9	765
UHCs	51.8	34.5	32.2	36.1	48.9	82.2	89.1	0.0	52.9	0.0	31
<b>Managing authority</b>											
Public	52.9	46.8	41.9	24.3	51.1	84.4	87.6	5.8	66.9	4.1	859
Private	77.0	78.1	76.0	42.8	83.0	86.0	48.5	17.6	61.6	12.3	63
<b>Ecological region</b>											
Mountain	47.3	38.0	33.5	22.2	47.7	84.8	85.9	4.8	67.8	3.2	118
Hill	56.0	55.3	50.2	26.6	56.4	84.3	87.8	7.3	71.2	5.3	479
Terai	54.9	43.4	39.1	25.1	50.7	84.6	80.4	6.3	59.2	4.3	325
<b>Earthquake-affected districts (14)</b>	57.5	52.8	49.0	31.2	58.3	87.7	85.2	8.3	77.3	7.6	193
National average	54.5	48.9	44.2	25.5	53.3	84.5	85.0	6.6	66.5	4.7	922

Note: Stand-alone HTC facilities are excluded from this table.

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

<sup>2</sup> Non-latex equivalent gloves considered acceptable

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

<sup>4</sup> Soap and running water or else alcohol-based hand disinfectant, latex gloves, sharps container, waste receptacle, and chlorine disinfectant all available at the service site.

Disposable latex gloves and a sharps<sup>3</sup> container were each available in 85 percent of facilities. Only about half of private hospitals (49 percent) had a sharps container at the ANC service site, however. Chlorine for disinfection was also available at the service delivery site in about two-thirds of ANC facilities. Conspicuously absent is the lowly waste receptacle, missing from more than 90 percent of ANC facilities. The survey only considered a waste receptacle with a plastic bin liner as acceptable; this may explain the low level of availability.

Overall, just about 5 percent of all ANC facilities had all the listed infection control items at the ANC service site on the day of the survey. The low percentage is clearly, a direct result of the low proportions of facilities with an acceptable waste receptacle.

### **6.3 Prevention of Mother-to-Child Transmission of HIV**

Prevention of mother-to-child transmission (PMTCT) of HIV usually involves a four-pronged approach: (1) the primary prevention of HIV infection, (2) prevention of unintended pregnancies in HIV-positive women, (3) use of a comprehensive treatment package that includes antiretroviral (ARV) medicines for HIV-positive pregnant women, and (4) provision of comprehensive care to the mother, the newborn, and other family members. PMTCT services are often offered in conjunction with antenatal and obstetric delivery services and may include a variety of interventions. The degree to which a facility offers the total package often reflects the level of staffing and whether the facility offers either antenatal care or delivery services, or both.

Table 6.3 first provides the percentages of facilities with ANC that also provide various PMTCT services. Also presented is information on the availability of the individual interventions or components of PMTCT at facilities offering ANC and any PMTCT services.

Overall, only 18 percent of ANC facilities say they offer some form of service geared at preventing mother-to-child transmission (PMTCT) of HIV. Availability ranges from 10 percent of UHCs to 78 percent of zonal and above hospitals. There is not much variation by ecological region; however, facilities in Terai region have a slight edge over facilities in other regions in terms of availability of PMTCT services. Also, availability of PMTCT services in the 14 earthquake-affected districts is half the national average at 9 percent.

Virtually all ANC facilities (99 percent) that offer any PMTCT services offer HIV testing and counseling services for pregnant women. However, HIV testing for infants born to HIV+ women is much less widely available. This service is expected only in hospitals; yet on average, only 19 percent of hospitals say they offer this service. However, zonal and above hospitals (55 percent) are more likely to offer HIV testing for infants born to HIV+ women compared with district-level (38 percent) and private hospitals (12 percent).

Infant and young child feeding, nutritional counseling for HIV+ pregnant women and their infants, and family planning counseling for HIV+ women are each services available in about 8 in 10 facilities.

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<sup>3</sup> Disposable puncture-proof containers for disposal of sharp objects, including needles.

Table 6.3 Availability of services for prevention of mother-to-child transmission of HIV in facilities offering antenatal care services

Among facilities offering antenatal care (ANC) services, the percentages offering services for the prevention of mother-to-child transmission (PMTCT) of HIV and, among the facilities offering PMTCT services, the percentages with specific PMTCT program components, by background characteristics, Nepal HFS 2015

Background characteristics	Percentage of facilities offering ANC that provide any PMTCT <sup>1</sup>	Number of facilities offering ANC	Percentage of ANC facilities offering PMTCT that provide:							Number of facilities offering ANC and any PMTCT services	Number of facilities excluding PHCCs, HPs, and UHCs
			HIV testing and counseling for pregnant women	HIV testing for infants born to HIV+ women	ARV prophylaxis for HIV+ women	ARV prophylaxis for infants born to HIV+ women	Infant and young child feeding counseling	Nutritional counseling for HIV+ pregnant women and their infants	Family planning counseling for HIV+ women		
<b>Facility type</b>											
Zonal and above hospitals	78.0	6	100.0	55.3	65.8	61.1	95.3	95.3	100.0	4	6
District-level hospitals	56.2	15	100.0	38.4	46.3	46.3	95.1	92.7	92.7	8	15
Private hospitals	21.2	63	100.0	11.7	6.2	6.2	87.0	88.6	90.1	13	63
PHCCs	39.8	42	98.8	na	12.2	12.2	89.0	78.0	85.4	17	0
HPs	15.8	765	100.0	na	6.0	6.0	78.7	77.5	82.1	121	0
UHCs	9.5	31	100.0	na	0.0	0.0	38.9	38.9	38.9	3	0
<b>Managing authority</b>											
Public	17.9	859	99.9	43.0	10.5	10.3	80.5	78.2	82.7	154	21
Private	21.2	63	100.0	11.7	6.2	6.2	87.0	88.6	90.1	13	63
<b>Ecological region</b>											
Mountain	11.1	118	100.0	7.7	6.3	6.3	92.2	81.1	85.8	13	5
Hill	16.1	479	100.0	20.7	10.5	10.5	81.0	80.6	81.9	77	42
Terai	23.7	325	99.7	19.7	10.4	10.2	79.0	77.0	84.2	77	36
<b>Earthquake-affected districts (14)</b>											
	8.8	193	100.0	16.3	10.9	10.9	78.6	78.6	78.6	17	25
National average	18.1	922	99.9	19.4	10.1	10.0	81.0	79.0	83.3	167	83

Note: ARV = antiretroviral.

Note: Stand-alone HTC facilities are excluded from this table.

Note: PHCCs, HPs, and UHCs are excluded from analysis for the indicator "HIV testing for infants born to HIV+ women," as this service is not expected in these facility types.

<sup>1</sup> Facility provides any of the following services for the prevention of transmission of HIV from an HIV-positive pregnant woman to her child: HIV testing and counseling for pregnant women, HIV testing for infants born to HIV-positive women, ARV prophylaxis for HIV-positive pregnant women, ARV prophylaxis for infants born to HIV-positive women, infant and young child feeding counseling for prevention of mother-to-child transmission, nutritional counseling for HIV-positive pregnant women and their infants, family planning counseling for HIV-positive pregnant women, co-trimoxazole to newborns of HIV-positive women, and ART prophylaxis to HIV-positive pregnant women.

## 6.4 Delivery and Newborn Care Services

Table 6.4 provides information on the availability of various maternal health services. In addition to stand-alone HTC facilities, Sukra Raj, Kanti, and Bir hospitals are excluded from analysis of delivery and newborn care services. Only half (49 percent) of facilities report that they provide normal delivery services. While all district level hospitals and most PHCCs offer normal delivery services, only three in four zonal and above hospitals say they offer normal delivery services. Facilities in Terai region are much less likely than facilities in Mountain and Hill regions to provide delivery services (33 percent vs. 57 percent).

Cesarean delivery services are available in only a small proportion (5 percent) of facilities. As expected, cesarean delivery services are available mainly in hospitals; about half of private and district-level hospitals, and 79 percent of zonal and above hospitals provide cesarean delivery services.

Table 6.4 Availability of normal delivery and other maternal health services

Among all facilities, the percentages that offer normal delivery and cesarean delivery services and, among facilities that offer normal delivery services, the percentages offering specific maternal health services and having 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, Nepal HFS 2015

Background characteristics	Percentage of facilities offering:		Number of facilities	Percentage of facilities offering normal delivery services that have:					Number of facilities offering normal delivery services
	Normal delivery service	Cesarean delivery		Assisted delivery	Medical abortion	Comprehensive abortion care (CAC)	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	
<b>Facility type</b>									
Zonal and above hospitals	75.4	78.8	6	100.0	81.5	86.1	81.9	100.0	5
District level hospitals	100.0	53.9	16	81.6	72.4	85.5	89.5	100.0	16
Private hospitals	64.2	49.5	70	51.8	55.3	62.9	60.7	91.9	45
PHCCs	96.1	1.0	42	38.8	54.5	40.9	45.9	95.5	41
HPs	45.3	0.0	775	17.6	16.1	0.0	12.2	90.5	351
<b>Managing authority</b>									
Public	47.4	1.6	871	23.0	22.7	8.2	19.3	91.5	413
Private	64.2	49.5	70	51.8	55.3	62.9	60.7	91.9	45
<b>Ecological region</b>									
Mountain	57.2	2.1	118	26.1	10.7	7.0	12.0	89.9	67
Hill	57.3	4.9	482	21.2	22.2	10.6	18.0	91.7	276
Terai	33.4	6.4	340	37.0	44.0	24.6	43.2	92.0	114
<b>Earthquake affected districts (14)</b>	40.6	7.9	195	22.7	25.6	19.8	25.4	77.2	79
National average	48.6	5.1	940	25.8	25.9	13.6	23.4	91.5	457

Note: Stand-alone HTC sites, Sukra Raj, Bir and Kanti children's hospitals are excluded from analysis of normal delivery services.

Note: The total number of facilities offering normal delivery services includes 1 UHC offering normal delivery services that is not shown in the table.

Among facilities that offer normal delivery services, 1 in 4 say they provide assisted (instrumental) vaginal delivery services, mainly district-level and zonal and above hospitals (82 percent and 100 percent, respectively). While 96 percent of PHCCs provide normal delivery services, only 39 percent of them report providing assisted vaginal delivery services. Medical abortion and comprehensive abortion care (CAC) services are reported by equally small proportions of facilities that offer normal delivery services (26 percent and 14 percent, respectively). District level hospitals and zonal and above hospitals are more likely than other facility types to provide medical abortion and comprehensive abortion care services (Table 6.4).

Among the facilities that offer normal delivery services, 92 percent reported that they have a provider of delivery care available on-site or on-call 24 hours a day. However, only 23 percent of facilities

that offer normal delivery had a duty schedule for on-site or on-call 24/7 delivery staff available (Table 6.4). The proportion of facilities with providers on-site or on-call with an observed duty schedule is lowest in HPs (12 percent) and in PHCCs (46 percent) (Table 6.4).

Availability of guidelines for delivery care is very low; on average, only one in five facilities that offers normal delivery services had the NMS volume III guideline or the Reproductive Health (RH) clinical guideline at the service site on the day of the survey (Table 6.5). Barely 1 percent of private hospitals had any guidelines on delivery care. Availability of guidelines among government facilities (zonal and above hospitals, district level hospitals, PHCCs and HPs) is also low, but uniform (between 22 percent and 27 percent).

**Table 6.5 24/7 delivery services by skilled provider and guidelines**

Among facilities offering normal delivery services, the percentages providing 24/7 delivery service by a skilled provider, and the percentages having guidelines for delivery care, by background characteristics, Nepal HFS 2015

Background characteristics	Percentages providing 24/7 delivery services by a skilled provider <sup>1</sup>	Percentages having guidelines for delivery care <sup>2</sup>	Number of facilities offering normal delivery services
<b>Facility type</b>			
Zonal and above hospitals	81.9	27.2	5
District-level hospitals	89.5	25.0	16
Private hospitals	60.7	0.5	45
PHCCs	45.9	21.7	41
HPs	12.2	24.4	351
<b>Managing authority</b>			
Public	19.3	24.1	413
Private	60.7	0.5	45
<b>Ecological region</b>			
Mountain	12.0	20.8	67
Hill	18.0	21.1	276
Terai	43.2	24.3	114
<b>Earthquake-affected districts (14)</b>			
	25.4	6.4	79
National average	23.4	21.8	457

Note: Stand-alone HTC sites, Sukra Raj Hospital, Kanti Children's Hospital, and Bir Hospital are excluded from analysis of normal delivery services.

Note: The total number of facilities includes one UHC offering normal delivery services that is not shown in the table.

<sup>1</sup> Facility reports that they provide normal delivery services, and a person skilled in conducting deliveries is present at the facility or on call at all times, including weekends, and a 24/7 duty schedule was observed.

<sup>2</sup> Facility has NMS volume III guideline or RH clinical guideline at the service site on the day of the survey.

## 6.5 Equipment for Routine Delivery Services and Immediate Newborn Care

The quality of delivery services depends on the availability of guidelines, staff who are up-to-date on trainings, and certain basic equipment. Table 6.6 reports the extent to which basic equipment to support obstetric delivery care were available on the day of the survey in facilities that offer normal delivery services. A minimum of 93 percent of facilities that offer normal delivery services had each of the following items: a delivery bed, a delivery pack<sup>4</sup> and latex gloves. Furthermore, at least 80 percent of facilities had a blank partograph and neonatal bag and mask. While high, every facility that offers normal delivery services must have at the minimum a neonatal bag and mask.

Other equipment to support delivery care were not that widely available. About 6 in 10 facilities had emergency transport. A similar proportion of facilities had a suction apparatus (mucus extractor). UHCs

<sup>4</sup> A sterile delivery pack was available at the delivery site, or else all of the following individual items of equipment were present: cord clamp, episiotomy scissors, scissors or blade to cut cord, suture material with needle, and needle holder.



were least likely to have a suction apparatus. Facilities in Mountain region are comparatively much less likely than those in Hill and Terai to have suction apparatus (42 percent vs. 58 percent and 84 percent, respectively).

**Table 6.6 Availability of equipment for delivery services**

Among facilities offering normal delivery services, the percentages having emergency transport and equipment for delivery care, by background characteristics, Nepal HFS 2015

Background characteristics	Equipment										Number of facilities offering normal delivery services
	Emergency transport <sup>1</sup>	Examination light <sup>2</sup>	Delivery pack <sup>3</sup>	Suction apparatus (mucus extractor)	Manual vacuum extractor	Vacuum aspiration kit or MVA kit <sup>4</sup>	Neonatal bag and mask	Partograph <sup>5</sup>	Gloves <sup>6</sup>	Delivery bed	
<b>Facility type</b>											
Zonal and above hospitals	95.5	100.0	100.0	95.5	95.5	81.5	100.0	95.5	100.0	100.0	5
District-level hospitals	93.4	88.2	100.0	96.1	89.5	81.6	98.7	97.4	97.4	100.0	16
Private hospitals	96.2	83.4	90.6	90.5	47.6	51.2	79.8	60.5	91.2	94.1	45
PHCCs	74.8	68.2	97.0	75.3	37.8	47.4	93.4	85.2	94.5	98.5	41
HPs	54.6	55.4	92.2	54.8	11.1	8.3	81.1	80.9	92.3	96.2	351
<b>Managing authority</b>											
Public	58.6	58.3	93.1	58.9	17.8	15.7	83.2	82.2	92.7	96.6	413
Private	96.2	83.4	90.6	90.5	47.6	51.2	79.8	60.5	91.2	94.1	45
<b>Ecological region</b>											
Mountain	44.2	53.1	93.8	41.7	27.3	17.1	74.3	80.7	93.2	92.4	67
Hill	58.4	61.4	91.3	58.0	15.9	15.5	82.0	80.0	91.2	96.4	276
Terai	82.4	63.6	96.1	83.7	28.6	29.4	89.9	79.7	95.4	98.7	114
<b>Earthquake-affected districts (14)</b>	78.7	69.5	90.7	70.6	19.6	22.3	85.5	79.5	90.7	93.0	79
National average	62.3	60.7	92.9	62.0	20.7	19.2	82.8	80.0	92.5	96.3	457

Note: Stand-alone HTC facilities are excluded from this table.

Note: The total number of facilities includes one UHC offering normal delivery services that is not shown in the table.

<sup>1</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>2</sup> A functioning flashlight is acceptable.

<sup>3</sup> Either the facility had a sterile delivery pack available at the delivery site or else 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>4</sup> Facility had a functioning vacuum aspiration kit or an MVA kit available at the service delivery site.

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

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

On average, only 21 percent of facilities had a manual vacuum extractor (for assisted delivery). This is available mainly in zonal and above and district-level hospitals (96 percent and 90 percent, respectively). Similarly, only 20 percent of facilities, on average, had a manual vacuum aspiration (MVA) kit for medical abortion available. As with vacuum extractors, MVA kits are mainly available in zonal and above hospitals, and in district-level hospitals (each 82 percent). As shown in Table 6.4, zonal and above and district-level hospitals are also the facilities that provide assisted delivery and medical abortion services in higher proportions, corresponding with the availability of vacuum extractor and MVA kits.

## 6.6 Newborn Care Practices

The 2015 NHFS collected information on newborn care practices at the surveyed facilities. Survey findings on these practices are presented in Table 6.7. Virtually all facilities report that initiating breastfeeding within the first hour of delivery, as well as wrapping newborns to keep them warm, are routine practice at the facility (99 percent and 97 percent, respectively). However, while high (at 91 percent), not all facilities report that delivery to the abdomen (for skin-to-skin contact) is a routine practice. There is very little variation by facility type; however, district-level and private hospitals are slightly less likely than other facility types to report delivery to the abdomen as a routine practice.

Table 6.7 Newborn care practices

Among facilities offering normal delivery services, the percentages reporting that the indicated newborn practice is a routine component of newborn care at the facility, by background characteristics, Nepal HFS 2015

Background characteristics	Percentage of facilities offering normal delivery services that have:					Number of facilities offering normal delivery services
	Delivery to the abdomen (skin-to-skin)	Drying and wrapping newborns to keep warm	Initiation of breastfeeding within the first hour	Applying chlorhexidine for cord care	Delay bathing until after 24 hours	
<b>Facility type</b>						
Zonal and above hospitals	90.9	100.0	95.5	63.4	68.3	5
District-level hospitals	86.8	100.0	100.0	72.4	72.4	16
Private hospitals	84.4	97.0	96.9	25.4	68.4	45
PHCCs	94.5	100.0	100.0	72.3	64.1	41
HPs	91.2	96.9	99.0	66.9	68.1	351
<b>Managing authority</b>						
Public	91.3	97.4	99.1	67.7	67.9	413
Private	84.4	97.0	96.9	25.4	68.4	45
<b>Ecological region</b>						
Mountain	85.2	98.2	98.2	62.0	62.7	67
Hill	93.2	96.5	99.0	61.7	69.4	276
Terai	87.7	99.0	99.0	69.0	67.7	114
<b>Earthquake-affected districts (14)</b>						
	93.5	100.0	99.7	60.6	70.2	79
National average	90.7	97.3	98.9	63.6	68.0	457

Note: Stand-alone HTC facilities, Sukra Raj Tropical Hospital, Kanti Children's Hospital, Bir Hospital, and Nepal Police Hospital are excluded from this table.

Note: The total number of facilities includes one UHC facility offering normal delivery services that is not shown in the table.

Nepal has a Chlorhexidine Cord Care Program, promoting the application of 7.1% chlorhexidine digluconate w/v ointment on the umbilical cord stump of newborns. Only 64 percent of facilities report as a routine practice the application of chlorhexidine ointment for cord care. District-level hospitals and PHCCs (each 72 percent) are most likely, while private hospitals are least likely (at 25 percent) to report the application of chlorhexidine ointment as a routine practice. Facilities in Terai region are slightly more likely than those in the other regions to have this as a routine practice.

It is recommended to delay bathing newborns until at least 24 hours after delivery. Overall, 68 percent of facilities offering normal delivery services report that they follow this practice.

## 6.7 Signal Functions for Emergency Obstetric and Neonatal Care

Outcome indicators of maternal health, such as the maternal mortality ratio, require large numbers of observations in the denominator, and they are amenable to change only in the long term, over a minimum of four to five years. In recognition of these limitations, process indicators have been developed that better facilitate data collection and interpretation. These indicators, called the UN Process Indicators, are key interventions and activities that have a direct bearing on maternal outcomes, including mortality and morbidity, and indicative of a certain type and level of care. Availability of these interventions and services, or *signal functions*, is proven to significantly reduce maternal deaths and improve birth outcomes. They consist of:

1. Administration of parenteral antibiotics
2. Administration of parenteral oxytocic drugs
3. Administration of parenteral anticonvulsants/sedatives for pre-eclampsia and eclampsia
4. Manual removal of the placenta
5. Removal of retained products of conception
6. Assisted vaginal delivery

7. Neonatal resuscitation
8. Blood transfusions
9. Surgery (cesarean section)

Facilities are considered *basic* emergency obstetric care (BEmONC) facilities if they provide the first seven functions at least once over a designated 3-month period and *comprehensive* emergency obstetric care (CEmONC) facilities if they provide all nine functions at least once over a designated 3-month period.

The 2015 NHFS examined hospitals, PHCCs and HPs that had applied or carried out these interventions at least once during the three months preceding the survey. Table 6.8 presents findings among these facilities (hospitals, PHCCs, and HPs) while Table 6.9 provides additional breakdown on the first seven signal functions for HPs only.

### *Basic Emergency Obstetric and Neonatal Care*

In general, the proportions of facilities reporting that they had carried out these signal functions are low. For example, barely 1 in 5 facilities carried out any of the following interventions: (1) parenteral antibiotics (21 percent), (2) manual removal of placenta (22 percent), (3) removal of retained products of conception (17 percent), and (4) neonatal resuscitation (19 percent) at least once during the three months before the survey. Even fewer carried out parenteral administration of anticonvulsant (5 percent) and conducted assisted vaginal delivery (8 percent). A larger proportion (43 percent) administered parenteral oxytocic during that period. For each of these 7 interventions, public hospitals are much more likely than private hospitals and other facility types to carry out these interventions. For some of the interventions, such as administration of parenteral oxytocic, manual removal of placenta, removal of retained product of conception, and neonatal resuscitation, PHCCs are more likely to than private hospitals to carry out these interventions.

Overall, only 3 percent of facilities performed all seven signal functions at least once during the three months preceding the survey and can be considered as functional BEmONC facilities. This is largely as a result of poor performance of HPs and PHCCs.

### *Comprehensive Emergency Obstetric and Neonatal Care*

Because PHCCs and HPs are not expected to provide comprehensive emergency obstetric services, they are excluded from analysis of CEmONC services.

Thirty-eight percent of hospitals carried out blood transfusion in an obstetrics context and 43 percent performed a cesarean section at least once during the three months preceding the survey. For these two interventions, public hospitals are more likely than private hospitals to have carried out these interventions.

Overall, during the three months preceding the survey, 18 percent of hospitals applied or carried out all nine signal functions that constitute comprehensive emergency obstetric care, and can be considered functional comprehensive emergency obstetric care facilities. Zonal and above hospitals, at 65 percent, are more likely to carry out all nine signal functions compared with district-level (28 percent) and private (12 percent) hospitals.

**Table 6.8 Signal Functions for emergency obstetric and neonatal care (EmONC) and functional Basic EmONC and Comprehensive EmONC facilities – All facilities**

Among all hospitals, PHCCs and HPs, percentages that reported performing the signal functions for emergency obstetric and neonatal care at least once in the 3 months preceding the survey, and percentages that can be considered functional Basic Emergency Obstetric and neonatal care (BEmONC) and percentages that can be considered functional Comprehensive Emergency Obstetric and Neonatal care (CEmONC) facilities, by background characteristics, Nepal HFC 2015

Background characteristics	Percentage that applied or carried out:											Number of facilities	Number of facilities excluding HTC, UHCs, PHCCs, HPs, Bir, Sukra Raj, and Kanti hospitals
	Parenteral antibiotics	Parenteral oxytocic	Parenteral anticonvulsant	Assisted vaginal delivery (AVD)	Manual removal of placenta	Removal of retained products of conceptions	Neonatal resuscitation	Blood transfusion	Cesarean delivery	BEmONC <sup>1</sup>	CEmONC <sup>2</sup>		
Public hospitals only (zonal & district)	85.1	95.9	46.9	65.6	78.3	80.2	81.2	55.8	58.7	44.0	37.2	21	21
<b>Facility type</b>													
Zonal and above hospitals	76.4	84.0	64.7	84.0	76.4	79.9	84.0	80.2	84.0	64.7	64.7	5	5
District level hospitals	88.2	100.0	40.8	59.2	78.9	80.3	80.3	47.4	50.0	36.8	27.6	16	16
Non-government hospitals	46.4	50.8	20.0	22.0	34.4	28.2	30.8	32.1	37.9	13.2	11.7	70	70
PHCC	49.5	89.8	8.7	18.4	49.9	42.2	51.4	na	na	4.8	na	42	na
HP	14.8	38.5	2.3	4.7	17.2	12.3	13.9	na	na	1.0	na	775	na
National average	20.5	43.1	5.0	8.1	21.5	16.5	18.5	37.6	42.7	3.1	17.8	908	91

Note: This table excludes stand-alone HTCs, UHCs, as well as Bir, Sukra Raj and Kanti hospitals.

<sup>1</sup> Facility reported that it provides delivery and newborn care services, and applied or carried out each of the following seven signal functions at least once in the 3 months before the survey: 1) parenteral administration of antibiotics, 2) parenteral administration of oxytocin or other uterotonic, 3) parenteral administration of anticonvulsant for hypertensive disorders of pregnancy, 4) assisted vaginal delivery, 5) manual removal of placenta, 6) removal of retained products of conception, and 7) neonatal resuscitation.

<sup>2</sup> Facility reported that it provides delivery and newborn care services, and that they have done at least one Cesarean delivery in the 3 months before the survey, that they have done blood transfusion in an obstetric context at least once in the 3 months before the survey, and have also applied or carried out each of the following seven signal functions at least once in the 3 months before the survey: 1) parenteral administration of antibiotics, 2) parenteral administration of oxytocin or other uterotonic, 3) parenteral administration of anticonvulsant for hypertensive disorders of pregnancy, 4) assisted vaginal delivery, 5) manual removal of placenta, 6) removal of retained products of conception, and 7) neonatal resuscitation.

**Table 6.9 Signal functions for emergency obstetric and neonatal care (EmONC) and functional Basic EmONC - Health Posts**

Among all HPs, percentages that reported performing the signal functions for emergency obstetric and neonatal care at least once in the 3 months preceding the survey, and percentages that can be considered Basic Emergency Obstetric and neonatal care (BEmONC) HPs, by background characteristics, Nepal HFC 2015

Background characteristics	Percentage that applied or carried out:							Functional BEmONC <sup>1</sup>	Number of facilities
	Parenteral antibiotics	Parenteral oxytocic	Parenteral anticonvulsant	Assisted vaginal delivery (AVD)	Manual removal of placenta	Removal of retained products of conceptions	Neonatal resuscitation		
<b>Facility type</b>									
HP	14.8	38.5	2.3	4.7	17.2	12.3	13.9	1.0	775
<b>Ecological region</b>									
Mountain	17.7	47.8	1.8	5.3	24.8	15.5	15.6	1.8	108
Hill	16.5	47.1	1.6	4.4	19.7	13.4	14.7	0.3	403
Terai	11.2	21.4	3.6	5.0	10.4	9.5	12.0	1.8	264
National average	14.8	38.5	2.3	4.7	17.2	12.3	13.9	1.0	775

<sup>1</sup> Facility reported that it provides delivery and newborn care services, and applied or carried out each of the following seven signal functions at least once in the 3 months before the survey: 1) parenteral administration of antibiotics, 2) parenteral administration of oxytocin or other uterotonic, 3) parenteral administration of anticonvulsant for hypertensive disorders of pregnancy, 4) assisted vaginal delivery, 5) manual removal of placenta, 6) removal of retained products of conception, and 7) neonatal resuscitation.



## 7 HIV AND AIDS

### 7.1 HIV Testing and Counselling Services

The 2015 NHFS collected information on the availability of various aspects of HIV testing and counselling services in Nepali health facilities. Survey findings on the availability of HIV testing and counselling services are presented in Table 7.1.

The 2015 NHFS considers a facility as having an HIV testing system if the facility reports (1) conducting HIV testing in the facility or (2) testing in an external testing site and has an agreement with that external site that test results will be returned to the facility. Overall, only 17 percent of facilities have an HIV testing system. There is, however, very wide variation in availability of HIV testing services. First, HIV testing is not available in UHCs, that is, zero percent of UHCs report having an HIV testing system. Second, only 5 percent of HPs report having an HIV testing system. Third, all zonal-level hospitals, and nearly 9 in 10 district-level and private hospitals have an HIV testing system compared with 47 of PHCCs. Facilities in Terai are slightly more likely than facilities in other regions to have an HIV testing system.

Table 7.1 Availability of HIV testing and counseling services

Among all facilities, the percentages that report having an HIV testing system and, among facilities with an HIV testing system, the percentages that have HIV testing capacity at the facility and other items to support the provision of quality HIV testing and counseling services, by background characteristics, Nepal HFS 2015

Background characteristics	Percentage of all facilities with HIV testing system <sup>1</sup>	Number of facilities	Percentage of facilities with HIV testing system that have:					Number of facilities having HIV testing system
			HIV testing capacity <sup>2</sup>	HIV testing and counseling guidelines	Trained provider <sup>3</sup>	Visual and auditory privacy <sup>4</sup>	Condoms <sup>5</sup>	
<b>Facility type</b>								
Zonal and above hospitals	100.0	6	100.0	55.3	45.1	96.3	72.4	6
District-level hospitals	86.8	16	100.0	31.8	53.0	90.9	71.2	14
Private hospitals	87.2	70	100.0	3.3	8.4	94.0	20.7	61
PHCCs	46.5	42	100.0	9.4	32.3	85.4	78.1	20
HPs	5.0	775	100.0	6.0	45.4	88.2	92.4	38
UHCs	0.0	32	-	-	-	-	-	0
Stand-alone HTC	94.5	23	100.0	61.3	60.3	99.0	89.1	21
<b>Managing authority</b>								
Public	8.9	871	100.0	15.2	43.4	88.6	83.5	78
Private	88.9	92	100.0	18.4	21.9	95.3	38.5	82
<b>Ecological region</b>								
Mountain	12.0	118	100.0	2.9	49.1	94.2	84.0	14
Hill	14.6	492	100.0	19.2	24.1	90.0	62.3	72
Terai	20.9	353	100.0	17.2	37.1	93.6	54.0	74
<b>Earthquake-affected districts (14)</b>								
	16.8	200	100.0	17.8	19.1	95.6	55.8	34
National average	16.6	963	100.0	16.8	32.3	92.0	60.4	160

<sup>1</sup> Facility reports conducting HIV testing in the facility or else in an external testing site and having an agreement with that external site that test results will be returned to the facility.

<sup>2</sup> Facility reports conducting HIV testing in the facility and had HIV rapid diagnostic test kits or ELISA testing capacity or Western blot testing capacity observed in the facility.

<sup>3</sup> Facility had at least one interviewed staff member providing HIV testing services who reported receiving in-service training in some aspect of HIV/AIDS testing and counseling during the 24 months preceding the survey. The training must have involved structured sessions; it does not include individual instruction that a provider might have received during routine supervision.

<sup>4</sup> Private room or screened-off space available in HIV testing and counseling area that is a sufficient distance from sites where providers and/or other clients may be so that a normal conversation could not be overheard, and the client could not be observed by others

<sup>5</sup> Condoms available at the HIV testing and counseling site on the day of the survey

All (100 percent) of the facilities with an HIV testing system actually have HIV testing capacity at the facility (that is, the facility had an HIV rapid test kit or ELISA testing capacity or other HIV testing capacity on the day of the survey). Furthermore, 92 percent of facilities with an HIV testing system are able to assure visual and auditory privacy at the HIV testing site. However, only 17 percent had HIV testing and counseling service guidelines available at the testing site on the day of the visit. Stand-alone HTC facilities (61 percent) and zonal and above hospitals (55 percent) are more likely than the other facility types to have HIV testing and counseling guidelines.

Overall, 60 percent of facilities with an HIV testing system had condoms available at the HIV testing and counseling site on the day of the survey. Private hospitals (at 21 percent) are least likely to have condoms at the HIV testing and counseling site.

The survey also assessed the availability of trained staff at the facility. A facility is considered as having trained staff if at least one interviewed provider of HIV testing and counseling services reports that they received training related to their work during the 24 months preceding the survey. Only 3 in 10 facilities could be considered as having a trained provider (Table 7.1). Private hospitals (at 8 percent) are least likely to have a trained provider.

## 7.2 Antiretroviral Therapy (ART) Services

The survey collected information on elements considered important for the provision of quality ART services. In Nepal, ART services are not expected in all facilities, by policy. Therefore, while the 2015 NHFS collected ART-related information from all surveyed facilities where applicable, this analysis will only focus on the 59 unweighted (12 weighted) official ART-designated facilities. Findings are presented in Table 7.2.

Table 7.2. Availability of antiretroviral therapy services

Among ART-designated facilities that were surveyed, the percentages with indicated items to support the provision of quality ART services, by background characteristics, Nepal HFS 2015

Background characteristics	Percentage of facilities offering ART services that have:							Number of designated ART facilities		
	ART guidelines	Trained staff <sup>1</sup>	Laboratory diagnostic capacity for:				Renal or liver function test	First-line adult ART regimen available <sup>3</sup>	Weighted	Un-weighted
			Complete blood count <sup>2</sup>	CD4 cell count	RNA viral load					
<b>Facility type</b>										
Zonal and above hospitals	84.2	36.8	78.9	31.6	5.3	100.0	94.7	4	19	
District-level hospitals	54.1	40.5	73.0	8.1	0.0	86.5	75.7	8	37	
Private hospitals	66.7	0.0	100.0	0.0	0.0	100.0	66.7	1	3	
<b>Managing authority</b>										
Public	64.3	39.3	75.0	16.1	1.8	91.1	82.1	12	56	
Private	66.7	0.0	100.0	0.0	0.0	100.0	66.7	1	3	
<b>Ecological region</b>										
Mountain	40.0	20.0	100.0	0.0	0.0	80.0	80.0	1	5	
Hill	63.6	36.4	78.8	15.2	3.0	93.9	81.8	7	33	
Terai	71.4	42.9	66.7	19.0	0.0	90.5	81.0	4	21	
<b>Earthquake-affected districts (14)</b>	69.2	15.4	84.6	7.7	0.0	100.0	76.9	3	13	
National average	64.4	37.3	76.3	15.3	1.7	91.5	81.4	12	59	

<sup>1</sup> Facility had at least one interviewed provider of ART services who reported receiving in-service training in some aspects of ART during the 24 months preceding the survey. The training must have involved structured sessions; it does not include individual instruction that a provider might have received during routine supervision.

<sup>2</sup> Facility had a functioning hematology analyzer or functioning hematological counter with the necessary reagents available in the facility, or a hemocytometer (glass slide) with glass cover and microscope for the hemocytometer.

<sup>3</sup> Facility had first-line antiretroviral medicines (TDF/3TC/EFV single-dose combination) for adult treatment available in the facility.

Guidelines for ART services were available in about 6 in 10 of the ART-designated facilities, with zonal and above hospitals being most likely to have the guidelines. Facilities in Mountain region (at 40 percent) are least likely to have ART guidelines.

Fewer than 4 in 10 ART-designated facilities had recently trained staff for ART services, that is, at least one interviewed provider of ART in the facility reporting having received in-service training in some aspect of ART during the 24 months preceding the survey. In fact, not a single private hospital had recently trained staff.

Laboratory capacity for monitoring ART clients varied. For example, 76 percent of ART-designated facilities had the capacity for a complete blood count (CBC) test. A little better than 9 in 10 had the capacity to perform a liver or renal function test. However, tests for CD4 cell count and RNA viral load are much less



widely available. While only 15 percent of facilities could conduct CD4 tests, less than 5 percent could do RNA viral load tests.

Regular supply of first-line antiretroviral drugs (ARVs) is critical for a successful ART program. Among the ART-designated facilities, 81 percent had the first-line adult ART regimen available in the facility on the day of the survey. The availability of a first-line adult ART regimen is highest in zonal and above hospitals (95 percent) and lowest in private hospitals (67 percent).



## **8 MALARIA**

### **8.1 Availability of Malaria Services and Readiness**

Table 8.1 provides an overview of the availability of malaria services in Nepali health facilities. In addition, the table provides information on the availability of service guidelines, recently trained staff, and malaria diagnostic capacity.

Survey findings show that all facilities report that they offer malaria diagnosis and/or treatment services. However, items to support provision of quality malaria services are not that widely available. For example, only 10 percent of malaria facilities had the national treatment wallchart for malaria or the national clinical protocol for malaria available at the service site on the day of the survey. These guidelines were almost non-existent in private hospitals, UHCs, and facilities in Mountain region.

As with the guidelines, only small proportions of facilities had staff recently trained in either malaria diagnosis or malaria treatment. Although numbers are low, district-level hospitals and PHCCs are most likely to have staff with recent training (between 22 and 24 percent).

On a more positive note, capacity to confirm a malaria infection is universally available in facilities that offer malaria diagnosis and/or treatment services, that is, the facility has a functioning microscope with glass slides and relevant stains for malaria microscopy available somewhere in the facility or else an unexpired malaria rapid diagnostic test kit available somewhere in the facility (Table 8.1). A malaria rapid diagnostic test (RDT) is widely available in facilities, but only a small proportion of facilities (8 percent) have malaria microscopy capacity, and they are mainly hospitals. About 4 in 10 PHCCs also have malaria microscopy capacity.

**Table 8.1 Availability of malaria services and availability of guidelines, trained staff, and diagnostic capacity in facilities offering malaria services**

Among all facilities, the percentages offering malaria diagnosis and/or treatment services and, among facilities offering malaria diagnosis and/or treatment services, the percentages that have guidelines, trained staff, and diagnostic capacity to support the provision of quality service for malaria, by background characteristics, Nepal HFS 2015

Background characteristics	Percentage of all facilities offering malaria diagnosis and/or treatment services <sup>1</sup>	Number of facilities	Percentage of all facilities offering malaria diagnosis and/or treatment services that have:						Number of facilities offering malaria diagnosis and/or treatment services
			Guidelines	Trained staff		Diagnostics			
			National treatment wallchart for malaria or national clinical protocol for malaria	Staff trained in malaria diagnosis <sup>2</sup>	Staff trained in malaria treatment <sup>3</sup>	Malaria RDT <sup>4</sup>	Malaria microscopy <sup>5</sup>	Any malaria diagnostics <sup>6</sup>	
<b>Facility type</b>									
Zonal and above hospitals	100.0	6	14.3	0.0	3.4	100.0	69.3	100.0	6
District-level hospitals	100.0	16	15.8	23.7	23.7	100.0	57.9	100.0	16
Private hospitals	97.8	70	0.6	0.9	0.9	99.0	52.7	99.0	68
PHCCs	100.0	42	19.9	23.3	21.8	100.0	41.7	100.0	42
HPs	100.0	775	10.5	12.0	8.8	100.0	1.5	100.0	775
UHCs	98.1	32	3.0	8.8	8.2	100.0	0.0	100.0	31
<b>Managing authority</b>									
Public	99.9	871	10.8	12.5	9.6	100.0	4.9	100.0	870
Private	97.8	70	0.6	0.9	0.9	99.0	52.7	99.0	68
<b>Ecological region</b>									
Mountain	100.0	118	0.2	1.4	1.4	100.0	2.8	100.0	118
Hill	99.8	482	5.5	4.0	3.3	100.0	7.2	100.0	481
Terai	99.7	340	20.0	26.1	19.8	99.8	11.9	99.8	339
<b>Earthquake-affected districts (14)</b>	99.4	195	3.2	2.0	1.7	100.0	10.2	100.0	194
National average	99.8	940	10.1	11.7	9.0	99.9	8.4	99.9	938

Note: Stand-alone HTC facilities are excluded from this table.

<sup>1</sup> This is based on facilities self-reporting that they offer malaria diagnosis and/or treatment services. Facilities offering antenatal care services that reported that they provide malaria rapid diagnosis tests (RDT) or were found on the day of the survey visit to be conducting such tests at the ANC service site were counted as offering malaria diagnosis and/or treatment services.

<sup>2</sup> Facility has at least one interviewed provider of malaria services who reports receiving in-service training on malaria diagnosis during the 24 months preceding the survey. The training must have involved structured sessions; it does not include individual instruction that a provider might have received during routine supervision.

<sup>3</sup> Facility has at least one interviewed provider of malaria services who reports receiving in-service training on malaria treatment during the 24 months preceding the survey. The training must have involved structured sessions; it does not include individual instruction that a provider might have received during routine supervision.

<sup>4</sup> Facility had an unexpired malaria rapid diagnostic test kit available somewhere in the facility.

<sup>5</sup> Facility had a functioning microscope with glass slides and relevant stains for malaria microscopy available somewhere in the facility.

<sup>6</sup> Facility had either malaria RDT capacity or malaria microscopy capacity.

Table 8.2 builds on information presented in Table 8.1. It shows the availability of malaria medicines, other medicines, and malaria-related commodities at the facility. There are four first-line medicines for the treatment of uncomplicated malaria: tablet chloroquine, tablet primaquine, tablet quinine, and artemisinin combination therapy (ACT). Chloroquine tablets are the most widely available antimalarial medicines in facilities that offer malaria services; even then, tablet chloroquine is available in just 29 percent of facilities. UHCs are the least likely to have chloroquine available. Tablet primaquine is the next most widely available antimalarial, available in only 17 percent of facilities. Private hospitals, HPs, and UHCs are less likely than other facility types to have tablet primaquine. Artemisinin combination therapy (Coartem) is the least available antimalarial. Overall, only 31 percent had any of the four first-line medicines available in the facility on the day of the survey.

Other oral antimalarial tablets, quinine injection (for management of severe malaria), and artesunate injection, are almost nonexistent in Nepali health facilities that offer malaria services.

Sulfadoxine/pyrimethamine (SP) tablets for malaria prophylaxis, as well as long-lasting insecticide-treated mosquito nets (for malaria prevention) are lacking in Nepal health facilities.

Paracetamol, a common fever-reducing medicine, was available in almost all facilities, usually as tablets or an injection, although 85 percent had pediatric formulations.

Table 8.2 Availability of malaria medicines and commodities

Among facilities offering malaria diagnosis and/or treatment services, the percentages that have malaria medicines, sulfadoxine/pyrimethamine, paracetamol, and insecticide-treated bed nets (ITN) available in the facility on the day of the survey, by background characteristics, Nepal HFS 2015

Background characteristics	Percentage of all facilities offering malaria diagnosis and/or treatment services that have:												Number of facilities offering malaria diagnosis and/or treatment services
	Antimalarial medicines						Other medicines and commodities						
	ACT (Coartem)	Quinine tablets	Chloroquine tablets	Primaquine tablets	Any first-line <sup>1</sup>	Other oral antimalarial tablets	Quinine injection	Artesunate injection	Sulfadoxine/pyrimethamine (SP) <sup>2</sup>	Paracetamol tablets/injection	Paracetamol syrup or dispersible pediatric-dosed tablets	LLIN <sup>3</sup>	
<b>Facility type</b>													
Zonal and above hospitals	13.9	13.9	48.8	31.0	48.8	10.2	10.5	3.4	3.4	96.6	76.1	6.8	6
District level hospitals	5.3	10.5	51.3	40.8	52.6	3.9	5.3	3.9	1.3	98.7	94.7	10.5	16
Private hospitals	2.9	18.5	42.8	12.2	44.8	2.5	6.8	2.9	2.8	73.1	72.4	0.9	68
PHCCs	2.9	5.8	56.4	44.7	57.8	4.4	2.4	0.0	1.0	99.0	88.8	15.2	42
HPs	0.5	2.6	26.9	15.6	28.7	0.7	0.0	0.0	1.1	99.5	85.9	6.1	775
UHCs	0.0	0.0	11.5	11.6	13.8	0.0	0.0	0.0	6.3	100.0	89.3	0.0	31
<b>Managing authority</b>													
Public	0.8	2.9	28.3	17.4	30.2	1.0	0.3	0.1	1.3	99.4	86.2	6.4	870
Private	2.9	18.5	42.8	12.2	44.8	2.5	6.8	2.9	2.8	73.1	72.4	0.9	68
<b>Ecological region</b>													
Mountain	0.2	1.1	3.8	0.7	4.0	0.3	0.0	0.0	1.1	98.8	84.2	1.1	118
Hill	0.5	2.3	15.0	8.4	15.7	0.7	1.3	0.4	0.5	98.5	87.9	1.4	481
Terai	1.8	7.4	58.7	35.0	62.8	1.9	0.3	0.2	2.9	95.8	81.8	14.2	339
<b>Earthquake-affected districts (14)</b>	1.0	2.5	11.7	4.0	11.7	0.9	1.1	0.8	0.2	96.7	83.8	3.0	194
National average	0.9	4.0	29.4	17.0	31.3	1.1	0.8	0.3	1.4	97.5	85.2	6.0	938

Note: ACT = artemisinin combination therapy; SP = sulfadoxine/pyrimethamine (Fansidar).

Note: Stand-alone HTC facilities are excluded from this table.

<sup>1</sup> Facility has any of the following recommended first-line antimalarial medicines: ACT (Coartem) tablets, quinine tablets, chloroquine tablets, or primaquine tablets

<sup>1</sup> Facility had SP for intermittent preventive treatment of malaria in pregnancy (IPTp).

<sup>2</sup> Facility had long-lasting Insecticide-treated bed nets (LLINs) available in the facility store or at an ANC site for distribution to clients.

## **9 TUBERCULOSIS SERVICES**

### **9.1 Availability of Tuberculosis Services and Readiness**

Table 9.1 presents 2015 NHFS findings on the availability of TB services. In addition, the table provides information on the availability of service guidelines and diagnostic capacity.

Over 90 percent of facilities offer TB diagnosis and/or treatment services. Urban health centers (UHCs) (67 percent) and private hospitals (85 percent) are comparatively less likely than the other facility types to offer TB services. There is little variation in availability by ecological region.

On average, only 35 percent of TB facilities had the national TB control program manual available at the service site on the day of the survey. However, it is important to note that only 10 percent of private hospitals had the manual, thereby driving down the national average. The manual is also less available in HPs (36 percent) and UHCs (33 percent). However, most zonal and above hospitals (39%), district-level hospitals (43 percent) and PHCCs (42 percent) do have the manual available. Other TB-related manuals, specifically the HIV & TB co-infection guideline and the Multi-Drug Resistance (MDR)-TB treatment guideline, are less widely available. Zonal and above hospitals and district-level hospitals are more likely than other facility types to have these other guidelines (Table 9.1).

The fluorescence microscope for TB diagnosis is available on average in only a small proportion (3 percent) of facilities. As with other items described thus far, zonal and above hospitals (32 percent) and district-level hospitals (24 percent) are the most likely to have the fluorescence microscope.

Facilities offering TB services that examined sputum smears at the facility were asked if they had any quality assurance (QA) systems in place for the sputum smears that were assessed in the laboratory at the facility. Overall, only 7 percent had any QA system in place, either internal or external. Zonal and above hospitals (67 percent), district-level hospitals (71 percent) and PHCCs (51 percent) are most likely to have either an internal or external QA system in place (Table 9.1).

The 2015 NHFS interviewed providers of TB services and asked questions about in-service training that they had received in relation to their work. Information on those trainings is presented in Table 9.2. A total of 2,818 providers of TB services were interviewed. As shown in the table, very small proportions of these providers reported receiving in-service training in any of these topics during the 24 months preceding the survey.

**Table 9.1 Availability of tuberculosis services and availability of guidelines and diagnostic capacity**

Among all facilities, the percentages offering tuberculosis diagnosis and/or treatment services and, among facilities offering tuberculosis diagnosis and/or treatment services, the percentages that have guidelines and diagnostic capacity to support the provision of quality service for tuberculosis, by background characteristics, Nepal HFS 2015

Background characteristics	Percentage of all facilities offering tuberculosis diagnosis and/or treatment services	Number of facilities	Guidelines			Diagnostic capacity		Number of facilities offering tuberculosis diagnosis and/or treatment services
			National TB Control Program Manual	HIV & TB co-infection guideline	MDR-TB treatment guideline	Fluorescence Microscope (FM) - LED	Internal or external QC/QA	
<b>Facility type</b>								
Zonal and above hospitals	96.6	6	39.2	7.1	10.6	32.1	67.2	6
District-level hospitals	98.7	16	42.7	9.3	16.0	24.0	70.7	15
Private hospitals	85.4	70	10.2	1.0	1.4	14.1	22.9	60
PHCCs	100.0	42	42.2	8.2	9.2	10.7	50.9	42
HPs	94.0	775	36.4	4.9	6.8	0.6	1.5	728
UHCs	66.9	32	33.1	0.0	0.0	0.0	0.0	21
<b>Managing authority</b>								
Public	93.4	871	36.8	5.0	6.9	1.8	5.9	813
Private	85.4	70	10.2	1.0	1.4	14.1	22.9	60
<b>Ecological region</b>								
Mountain	88.5	118	23.8	1.8	3.6	1.4	5.1	104
Hill	92.8	482	31.2	6.1	7.8	2.3	6.4	447
Terai	94.3	340	43.9	3.8	5.7	3.5	8.5	321
<b>Earthquake-affected districts (14)</b>	91.9	195	32.0	5.1	6.4	2.8	7.2	179
National average	92.8	940	35.0	4.8	6.5	2.6	7.0	873

Note: MDR-TB = multi-drug resistance tuberculosis.

Note: Stand-alone HTC facilities are excluded from this table.



Table 9.2 Trained providers of TB services

Among interviewed providers of TB services, percentages reporting that they received training related to TB diagnosis or TB treatment in the 24 months preceding the survey, by background characteristics, Nepal HFS 2015

Background characteristics	Percentage reporting they have received training on indicated topics during the 24 months preceding the survey:									Number of interviewed providers of TB services
	Diagnosis of TB based on sputum tests using AFB smear microscopy	Diagnosis of TB based on clinical symptoms or TB diagnostic algorithm	Microscopic examination of sputum for diagnosing TB	Treatment prescription for TB	Treatment follow-up services for TB	DOTS <sup>1</sup>	Management of TB-HIV co-infection	Management of DR-TB	TB modular training	
<b>Facility type</b>										
Zonal and above hospitals	0.6	1.9	0.0	1.2	2.0	2.7	2.0	3.5	3.7	58
District-level hospitals	3.6	4.9	4.8	6.0	5.8	5.7	4.0	2.3	8.2	148
Private hospitals	0.5	0.5	2.6	0.7	0.8	1.5	0.2	0.3	1.9	354
PHCCs	2.6	3.2	4.1	4.5	4.3	5.5	1.1	1.6	6.7	236
HPs	0.1	1.9	0.3	2.3	4.0	7.3	1.4	0.9	5.7	1,973
UHCs	1.9	7.9	0.0	6.1	8.0	14.5	0.0	0.0	14.3	49
<b>Managing authority</b>										
Public	0.6	2.3	0.9	2.8	4.1	7.1	1.5	1.1	6.1	2,465
Private	0.5	0.5	2.6	0.7	0.8	1.5	0.2	0.3	1.9	354
<b>Ecological region</b>										
Mountain	1.0	1.0	0.7	2.4	2.1	5.8	0.5	0.6	5.5	241
Hill	0.6	2.6	0.9	2.9	4.1	5.7	2.0	1.4	6.1	1,405
Terai	0.5	1.7	1.5	2.1	3.6	7.2	0.8	0.6	4.9	1,172
<b>Earthquake-affected districts (14)</b>	0.1	1.6	0.6	1.4	2.7	3.6	0.9	1.2	4.9	615
National average	0.6	2.1	1.1	2.6	3.7	6.4	1.4	1.0	5.6	2,818

Note: Stand-alone HTC facilities are excluded from this table.

<sup>1</sup> DOTS = Directly Observed Treatment, Short-course.



## 10 LABORATORY SERVICES

### 10.1 Availability of Basic Laboratory Services

The 2015 NHFS collected information on availability of laboratory diagnostic services in surveyed health facilities. The 2015 NHFS defined laboratory services as the ability to conduct any test at the facility, including rapid diagnostic tests. Table 10.1 presents findings on facilities that have their own laboratory services and the availability of basic tests in those facilities.

On average only 25 percent of all facilities have their own laboratory. However, with the exception of UHCs (8 percent) and HPs (13 percent), practically all hospitals and the vast majority of PHCCs (87 percent) have their own laboratory services. By ecological region, facilities in Terai region (38 percent) are much more likely than facilities in Mountain (14 percent) and Hill (18 percent) to have their own laboratory services.

Among facilities with their own laboratory services, about half had the capacity to conduct urine protein and urine glucose tests on the day of the survey visit. However, as with availability of laboratory services, the vast majority of hospitals (over 80 percent), and about two in three PHCCs, had the capacity to conduct either of these urine tests on the day of the survey compared with only about one in ten HP. Better than half of the facilities (56 percent) had the capacity to do a urine pregnancy test on the day of the survey. As with urine protein and urine glucose tests, hospitals and PHCCs are much more likely than HPs (29 percent) to have the capacity to do a urine pregnancy test. For each of these urine tests (urine protein, urine glucose, and urine pregnancy), facilities in Terai region are slightly less likely than facilities in either Mountain or Hill regions to have the capacity for these tests.

On average, 61 percent of facilities could do a blood hemoglobin test on the day of the survey. As with urine tests, the vast majority of hospitals (94 percent and above) and PHCCs (86 percent) could do a hemoglobin test compared with only 23 percent of HPs. Facilities in Hill region (70 percent) fare better than those in either Mountain or Terai regions (51 percent and 55 percent, respectively). Availability of blood grouping capabilities is overall very low, available on average in only 9 percent. In fact, only hospitals could do blood grouping, with availability ranging from percentages in the low 20s in district-level and private hospitals to 31 percent in zonal and above hospitals. Only 2 percent of PHCCs could do blood grouping.

Similar to urine and blood tests, routine stool testing is available mainly in zonal and above hospitals (86 percent) and district level hospitals (83 percent). Availability is a little lower in private hospitals (64 percent) and in PHCCs (60 percent). Only 17 percent of HPs can do routine stool tests.

None of the basic laboratory tests just described was available in any UHC that had its own laboratory.

Table 10.1 Availability of basic laboratory services

Among all facilities, the percentages having their own laboratory services, and among facilities having their own laboratory services, the percentages with capacity to conduct indicated urine and blood tests, by background characteristics, Nepal HFS 2015

Background characteristics	Facilities having own laboratory services	Number of facilities	Urine test			Blood test			Number of facilities having own laboratory services
			Protein	Glucose	Pregnancy	HB	Grouping	Stool routine test	
<b>Facility type</b>									
Zonal and above hospitals	100.0	6	82.2	82.2	78.8	96.6	31.0	86.3	6
District-level hospitals	100.0	16	93.4	93.4	93.4	97.4	21.1	82.9	16
Private hospitals	99.1	70	82.2	85.1	81.4	94.2	22.2	63.7	69
PHCCs	86.8	42	68.2	67.0	71.5	86.0	2.2	60.3	37
HPs	13.4	775	11.8	12.7	28.5	23.3	0.0	16.6	104
UHCs	8.0	32	0.0	0.0	0.0	0.0	0.0	0.0	3
<b>Managing authority</b>									
Public	18.9	871	34.6	34.9	45.7	46.7	3.6	35.0	165
Private	99.1	70	82.2	85.1	81.4	94.2	22.2	63.7	69
<b>Ecological region</b>									
Mountain	13.6	118	53.8	55.1	67.0	51.2	6.4	37.1	16
Hill	18.4	482	53.5	55.3	62.1	70.3	15.1	51.5	88
Terai	38.0	340	44.7	45.2	50.8	55.4	5.3	38.8	129
<b>Earthquake-affected districts (14)</b>									
	20.5	195	60.6	65.6	68.2	78.0	21.7	62.8	40
National average	24.9	940	48.6	49.7	56.2	60.7	9.1	43.5	234

Note: Stand-alone HTC facilities are excluded from this table.

## 11 INFORMATION MANAGEMENT

### 11.1 Health Management Information System (HMIS)

The 2015 NHFS collected pieces of information on health management information system (HMIS) in surveyed health facilities. Tables 11.1.1 and 11.1.2 present findings on various aspects of the state of HMIS in Nepali health facilities.

The vast majority of facilities (94 percent) report that they regularly compile an HMIS report (Table 11.1.1). However, only half of facilities (54 percent) have a designated HMIS focal person. UHCs (45 percent) and HPs (50 percent) are least likely to have a designated HMIS focal person. Facilities in Terai region (62 percent) are more likely than facilities in other regions to have a designated HMIS focal person.

**Table 11.1.1 HMIS status: HMIS reporting and designated focal person**

Among all health facilities, percentages that compile HMIS report regularly and percentages that have a designated HMIS focal person; among all facilities that compile HMIS report regularly, percentage having the previous months HMIS report, and among facilities with a designated HMIS focal person, percentages with the HMIS focal person trained in HMIS, by background characteristics, Nepal HFS 2015

Background characteristics	Among all facilities, percentages that:		Number of facilities	Last month's HMIS report observed	Number of facilities that compile HMIS report regularly	HMIS focal person trained on HMIS	Number of facilities with designated HMIS focal person
	Compile HMIS report regularly	Have a designated HMIS focal person					
<b>Facility type</b>							
Zonal and above hospitals	89.8	85.7	6	100.0	4	100.0	4
District-level hospitals	100.0	89.5	16	100.0	12	100.0	13
Private hospitals	91.3	78.8	70	100.0	41	100.0	36
PHCCs	97.1	74.3	42	100.0	34	100.0	31
HPs	94.3	50.3	775	100.0	605	100.0	360
UHCs	89.7	44.8	32	100.0	25	100.0	12
<b>Managing authority</b>							
Public	94.4	52.2	871	100.0	680	100.0	419
Private	91.3	78.8	70	100.0	41	100.0	36
<b>Ecological region</b>							
Mountain	94.4	42.5	118	100.0	93	100.0	41
Hill	93.9	51.8	482	100.0	382	100.0	225
Terai	94.3	61.6	340	100.0	247	100.0	190
<b>Earthquake-affected districts (14)</b>							
	96.4	56.1	195	100.0	160	100.0	97
National average	94.1	54.2	940	100.0	721	100.0	456

Note: Stand-alone HTC facilities are excluded from this table.

Among those facilities that compile an HMIS report regularly, all had the previous month's HMIS available (observed) on the day of the survey. Similarly, all facilities with a designated HMIS focal person reported that the focal person had received the necessary training on HMIS (Table 11.1.1)

Table 11.1.2 presents information on the availability of relevant HMIS tool kits among surveyed public (government) facilities. Only 41 percent of public facilities had the HMIS tool kit "recording and reporting tools in HMIS, 2070) available (observed) on the day of the survey. UHCs (at 27 percent) are less likely than the other public facilities (between 41 percent and 53 percent) to have the tool kit available. An additional 12% of facilities reported having the tool kit, but could not produce them that day.

About half of public facilities had the HMIS user manual available (observed) on the day of the survey. Comparatively, UHCs (22 percent) and zonal and above hospitals (38 percent) are less likely than district-level hospitals (51 percent), HPs (54 percent), PHCCs (57 percent) to have the HMIS user manual available on the day of the survey. Facilities in the 14 earthquake-affected districts compare unfavorably with the national average.

Table 11.1.2 HMIS status: HMIS tool kits and user manual

Among all public facilities, percentages having HMIS tool kits, and percentages having HMIS user manual and other HMIS related materials, by background characteristics, Nepal HFS 2015

Background characteristics	Among all public facilities, percentages having:					Number of public facilities
	HMIS tool kit "Recording and reporting tools in HMIS, 2070)" observed	HMIS tool kit "Recording and reporting tools in HMIS, 2070)" reported but not seen	HMIS user manual observed	Monthly monitoring sheet of past 3 months fully updated	Updated key statistics displayed	
<b>Facility type</b>						
Zonal and above hospitals	37.6	6.8	37.6	13.7	23.9	6
District-level hospitals	52.6	21.1	51.3	38.2	31.6	16
PHCCs	44.6	22.9	56.7	65.0	46.2	42
HPs	41.0	11.9	53.8	60.7	26.2	775
UHCs	26.8	4.6	21.7	43.9	15.2	32
<b>Ecological region</b>						
Mountain	38.3	9.8	48.2	59.3	23.6	116
Hill	40.3	11.6	54.6	61.2	28.0	449
Terai	42.6	14.4	51.4	57.2	26.5	306
<b>Earthquake-affected districts (14)</b>	30.4	14.5	38.8	62.1	22.4	173
National average	40.8	12.3	52.6	59.6	26.9	871

Note: Stand-alone HTC facilities are excluded from this table.

Six in 10 facilities had the monthly monitoring sheet for the preceding 3 months fully updated. HPs and PHCCs (61 percent and 65 percent, respectively) are more likely than zonal and above hospitals and the other public facilities to have a fully updated monthly monitoring sheet for the preceding 3 months.

Public facilities are required to display updated key statistics for the public to see. Findings show that only 27 percent of public facilities had such statistics displayed. PHCCs, at 46 percent, are most likely to display key statistics compared with the other public facilities.

## 11.2 Logistic Management Information System (LMIS)

Table 11.2 presents findings on the status of LMIS in public Nepali health facilities. Similar to HMIS, the vast majority of facilities (94 percent) report that they regularly compile an LMIS report. However, unlike HMIS, it ranges from 55 percent to 96 percent, with zonal and above hospitals and UHCs being the least likely to report that they regularly compile an LMIS report.

Sixty-one percent of public facilities report that they have a designated LMIS focal person. District-level hospitals (91 percent) and PHCCs (81 percent) are more likely than the other facility types to have a designated LMIS focal person.

LMIS guidelines are not widely available in public facilities. In fact, only 12 percent of facilities had the LMIS guideline (FLEX) available (observed) on the day of the survey. UHCs (less than 1 percent) and zonal and above hospitals (7 percent) fare the worst. The "pull system" manual was also not widely available; only 17 percent on average had this manual.

Among the facilities that report that they compile an LMIS report regularly, only 75 percent had a copy of the latest report that was submitted available (observed). Zonal and above hospitals (53 percent) and district-level hospitals (67 percent) are slightly less likely than the other facility types to have a copy of the latest report available.

Among facilities reporting that they have a designated LMIS focal person, only 60 percent reported that the focal person had received the necessary training on LMIS. UHCs are least likely to report that the focal person had received the necessary training.

Table 11.2 LMIS status

Among all public facilities, percentages that compile an LMIS report regularly, have designated an LMIS focal person, and have an LMIS guideline, and percentages that have the pull system manual; among public facilities that compile LMIS report regularly, percentages where a copy of the latest submitted LMIS report was observed, and among public facilities that have a designated LMIS focal person, percentages where the LMIS focal person was trained on LMIS, by background characteristics, Nepal HFS 2015

Background characteristics	Among all public facilities, percentages that:				Number of public health facilities	Copy of "latest LMIS report that was submitted" was observed	Number of public facilities that compile LMIS report regularly	Designated LMIS person trained on LMIS	Number of public facilities with designated LMIS focal person
	Compile LMIS report regularly	Have a designated LMIS focal person	Have LMIS guideline (FLEX) observed	Have "pull system manual" observed					
<b>Facility type</b>									
Zonal and above hospitals	51.9	64.9	6.8	10.2	6	52.6	3	58	4
District-level hospitals	88.2	90.8	19.7	25.0	16	67.2	14	59	14
PHCCs	93.1	81.1	17.0	17.0	42	76.0	40	66	34
HPs	95.8	60.7	11.9	17.0	775	74.9	742	61	470
UHCs	64.3	32.1	0.6	9.0	32	72.3	20	24	10
<b>Ecological region</b>									
Mountain	92.7	53.6	7.9	19.2	116	70.3	108	46	62
Hill	94.9	58.4	13.7	19.0	449	77.1	426	55	262
Terai	93.4	68.2	10.5	12.8	306	72.6	285	71	209
<b>Earthquake-affected districts (14)</b>	95.5	58.1	4.5	17.3	173	68.7	165	46	100
National average	94.1	61.2	11.8	16.8	871	74.7	819	60	533





## 12 HFOMC AND HDC

### 12.1 Distribution of HFOMC/HDC Member Interviews and Activities of HFOMC/HDC Members

The 2015 NHFS interviewed some members of the health facility operation and management committee (HFOMC) and hospital development committee (HDC) members as part of the survey. Table 12.1 presents information on the distribution of HFOMC and HDC members who were interviewed, as well as information on the number of facilities where the HFOMC/HDC questionnaire was applied. A total of 1,177 (weighted) HFOMC/HDC members were interviewed in 750 (weighted) facilities. The highest number of interviews took place in HPs.

Table 12.1 Distribution of HFOMC and HDC member interviews

Percent distribution and weighted and unweighted number of HFOMC and HDC members interviewed, by background characteristics, Nepal HFS 2015

Background characteristics	Weighted percent distribution of HFOMC and HDC members	Number of interviewed HFOMC and HDC members		Weighted number of facilities surveyed where HFOMC/HDC questionnaire was applied	Unweighted number of facilities surveyed where HFOMC/HDC questionnaires was applied
		Weighted	Unweighted		
<b>Facility type</b>					
Zonal and above hospitals	0.2	3	14	2	12
District level hospitals	1.7	20	99	13	64
PHCCs	4.6	54	264	35	172
HPs	93.4	1,099	610	699	385
<b>Ecological region</b>					
Mountain	12.9	152	162	101	103
Hill	54.0	636	478	399	304
Terai	33.1	389	347	251	226
<b>Earthquake-affected districts (14)</b>					
	18.1	214	156	141	110
<b>Total</b>	100.0	1,177	987	750	633

Table 12.2 presents information on reported activities of interviewed HFOMC/HDC members. Overall, 82 percent of interviewed members reported that they attended at least one HFOMC/HDC meeting in the 3 months preceding the survey. A significantly lower percentage (20 percent) reported that they received training related to HFOMC/HDC during the 24 months preceding the survey. Members associated with zonal and above hospitals are less likely to report receiving training compared with members associated with other facilities. Exactly half (50 percent) of interviewed members reported that they were engaged in organizing a Social Audit in the immediate past fiscal year (2070-2071). As with training, members associated with zonal and above hospitals are less likely to have been engaged in a Social Audit in the immediate past fiscal year compared with members associated with other facility types.

Table 12.2. Activities of HFOMC and HDC members

Among interviewed HFOMC and HDC members, percentages reporting that they attended at least one meeting in last 3 months, received training, and engaged in social audit, by background characteristics, Nepal HFS 2015

Background characteristics	Percentage of interviewed HFOMC/HDC members reporting that they:			Number of interviewed HFOMC and HDC members
	Attended at least one HFOMC or HDC meeting in last 3 months <sup>1</sup>	Received any training related to HFOMC or HDC during the 24 months before the survey	Were engaged in organizing Social Audit in the last fiscal year (2070-2071)	
<b>Facility type</b>				
Zonal and above hospitals	71.4	7.1	7.1	3
District-level hospitals	92.9	16.2	31.3	20
PHCCs	87.5	22.3	59.5	54
HPs	81.6	20.1	50.4	1,099
<b>Ecological region</b>				
Mountain	85.9	26.0	50.7	152
Hill	82.8	19.9	48.4	636
Terai	79.4	18.1	53.4	389
<b>Earthquake-affected districts (14)</b>	82.6	12.7	52.2	214
Total	82.1	20.1	50.4	1,177

<sup>1</sup> Interviewed committee member reported that the committee conducted at least one meeting in the last 3 months, and the member reported attending at least one such meeting.