

# Health Services Availability and Readiness in Seven Provinces of Nepal

Further Analysis of the  
2015 Nepal Health Facility Survey

DHS Further Analysis Reports No. 115



Government of Nepal  
Ministry of Health  
and Population





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### Further Analysis of the 2015 Nepal Health Facility Survey

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July 2018

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Editor: Bryant Robey

Document Production: Joan Wardell

This report presents findings from a further analysis undertaken as part of the follow-up to the 2015 Nepal Health Facility Survey (2015 NHFS). This study was carried out with support provided by the United States Agency for International Development (USAID) through The DHS Program (#AID-OAA-C-13-00095) and the UK Department for International Development (DFID). The views expressed are those of the authors and do not necessarily reflect the views of USAID or DFID or the United States Government or the UK Government.

Additional information about the 2015 NHFS may be obtained from Ministry of Health and Population, Ramshah Path, Kathmandu; telephone: +977-1-4262543/4262802, internet: <http://www.mohp.gov.np>, and New ERA, Rudramati Marg, Kalopul, P.O. Box 722, Kathmandu, Nepal; telephone: +977-1-4413603, e-mail: [info@newera.com.np](mailto:info@newera.com.np), internet: <http://www.newera.com.np/>.

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Recommended citation:

Aryal, K. K., R. Dangol, P. Gartoulla, and G. R. Subedi. 2018. *Health Services Availability and Readiness in Seven Provinces of Nepal*. DHS Further Analysis Reports No. 115. Rockville, Maryland, USA: ICF.

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## FOREWORD

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The 2015 Nepal Health Facility Survey (NHFS) is the first nationally representative comprehensive survey conducted as part of the worldwide Demographic and Health Surveys (DHS) project in the country. It combines the components of the Service Provision Assessment (SPA) survey of the Demographic and Health Surveys (DHS) Program, supported by the United States Agency for International Development (USAID); the World Health Organization (WHO) Service Availability and Readiness Assessment; the United Nations Population Fund (UNFPA) Facility Assessment for Reproductive Health Commodities and Services; and the Nepal-specific Service Tracking Survey, funded by the UK Department for International Development (DFID).

The standard format of the main report includes only a descriptive presentation of findings, without using analytical statistical methods to ascertain the significance of change, readiness index, and some causative association between variables. Though largely sufficient, the standard report is limited, particularly in providing answers to “why”, which are very essential in reshaping important policies and programs. Hence, following the dissemination of the 2015 NHFS, Ministry of Health and Population (MoHP) and partners have convened and agreed on key areas that are very important to assess progress and gaps, and ascertain determinants, in high-priority public health programs that MoHP is implementing. In this context, further analysis has been carried out by relevant technical professionals from MoHP and partners who are directly working on the given areas, with technical support and facilitation from research agencies.

The primary objective of the further analysis of the 2015 NHFS is to provide more in-depth knowledge and insights into key issues that emerged based on the data of 2015 NHFS, and this provides guidance in planning, implementing, refocusing, monitoring, and evaluating health programs related to these issues in Nepal. The long-term objective of the further analysis is to strengthen the technical capacity of the local institutions and individuals to analyze and use data from complex national population and health surveys to better understand specific issues per country need and situation. The further analysis includes topics on client satisfaction and quality of curative services for sick children, family planning, maternal health and health services availability and readiness in seven provinces in Nepal.

The further analysis of 2015 NHFS is the concerted effort of various individuals and institutions, and it is with great pleasure that I acknowledge the work that has gone into producing this useful document. The participation and cooperation that were extended by the members of the Technical Advisory Committee in the different phases of the survey are highly regarded.

I would like to thank the Public Health Administration Monitoring and Evaluation Division (PHAMED) of MoHP for its effort and dedication in the completion of this further analysis of 2015 NHFS. I would also like to extend my appreciation to USAID/Nepal for providing financial support for the further analysis. I would also like to acknowledge ICF for its technical assistance at all stages. Similarly, my sincere thanks go to the New ERA team for the overall management and coordination of the whole process.

  
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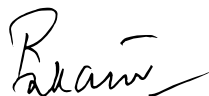


## ACKNOWLEDGMENTS

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This report is the result of significant efforts by several people from different organizations. I am grateful to the Monitoring and Evaluation Technical Working Group (M&E TWG) at the Public Health Administration Monitoring and Evaluation Division (PHAMED), Ministry of Health and Population (MoHP), and all its members, especially the coordinator of the M&E TWG, Giri Raj Subedi, for their contribution in conceptualizing this further analysis and producing the much-required evidence. I express my sincere acknowledgment for the support of the United States Agency for International Development (USAID)/Nepal, the UK Department for International Development (DFID)/Nepal, and New Era in producing this report. I would like to thank Ms. Sabita Tuladhar of USAID, and Mr. Yogendra Prasain of New Era, for their tremendous support in carrying out this task. I would like to express sincere thanks to Mr. Pradeep Poudel of NHSSP, and an M&E TWG member, for reviewing this report and providing valuable comments to improve it. I express my special thanks to all authors of this report for their significant efforts. I would like to thank Giri Raj Subedi, chief of M&E section, PHAMED, for steering the overall report write-up process; Krishna Kumar Aryal, from DFID Nepal Health Sector Programme 3 (NHSP3), Monitoring Evaluation and Operational Research (MEOR) project, for completing the report write up; and Rajendra Dangol from ICF for his contribution in data analysis. I express my sincere gratitude to Wenjuan Wang and Shireen Assaf from ICF, Melissa Chiappetta from Abt Associates USA, and Pragya Gartoulla from MEOR project for their contributions to produce this report. Similarly, I would like to thank ICF for their support throughout and especially for the training workshop that they provided for the Nepal team. I am thankful to Ms. Smritee Bajracharya, MEOR project, for her support during report finalization.

Finally, I am grateful to all experts who directly or indirectly contributed to and supported this study.



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## ACRONYMS

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AIDS	acquired immune deficiency syndrome
AMTSL	active management of third stage of labor
ANC	antenatal care
BCG	Bacillus Calmette-Guérin
CAC	comprehensive abortion care
DFID	Department for International Development
DoHS	Department of Health Services
EmONC	emergency obstetric and newborn care
EPI	expanded program of immunization
FEFO	first expired, first out
FP	family planning
HDC	hospital development committee
HF	health facility
HFOMC	health facility operation management committee
HIV	human immunodeficiency virus
HPs	health posts
HTCs	standalone HIV testing and counselling centers
IMCI	integrated maternal and childhood illness
IMNCI	integrated maternal neonatal and childhood illness
IUCD	intrauterine contraceptive device
LLIN	long lasting insecticide treated nets
mCPR	modern contraceptive prevalence rate
MEOR	monitoring evaluation and operational research
MoHP	Ministry of Health and Population
MUAC	mid upper arm circumference
NCDs	non-communicable diseases
NHFS	Nepal Health Facility Survey
NHSS	Nepal Health Sector Strategy
NHSS IP	Nepal Health Sector Strategy Implementation Plan
NHSS RF	Nepal Health Sector Strategy Results Framework
NIP	national immunization program
ORS	oral rehydration solution
PAC	post abortion care
PAL	practical approach to lung health
PHCCs	primary health care centers
PMTCT	prevention of mother-to-child transmission
QA	quality assurance
RDT	rapid diagnostic test
RDT	rapid diagnosis tests
SARA	service availability and readiness assessment
SBA	skilled birth attendant
SDGs	sustainable development goals

SP	sulfadoxine/pyrimethamine
SPA	service provision assessment
STIs	sexually transmitted infection
TB	tuberculosis
UHC	universal health coverage
UHCs	urban health centers
UK	United Kingdom
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development
$W_h$	design weight
WHO	World Health Organization

## EXECUTIVE SUMMARY

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The overall objective of this report is to provide health care delivery system program managers with information on the level of availability of basic and essential services in health facilities and the extent of preparedness of the facilities to provide quality health services in each of the seven provinces of Nepal. Following release of the report of the 2015 Nepal Health Facility Survey, the Ministry of Health and Population identified the need to disaggregate the survey results at the province level to allow policymakers to better determine how best to allocate available resources among the provinces. This report is intended to help fill this objective.

We performed further analysis of 2015 NHFS dataset, which included data from the following: an inventory questionnaire for all 963 facilities visited; interviews of 4,057 service providers; interviews of 987 Health Facility Operation Management Committee (HFOMC) and Hospital Development Committee (HDC) members; 2,186 sick child care observations; 1,509 antenatal care (ANC) client observations; 772 family planning client observations; and exit interviews with the caretakers of the sick children and with ANC clients, family planning clients, and 309 postpartum mothers. The report shows descriptive results for seven provinces of Nepal. In addition, we carried out multivariate analyses for five outcome variables of interest: provision of quality ANC services; provision of quality family planning services; provision of quality IMNCI services; and availability of basic diagnostic tests and safe disposal of health care waste.

Regarding general service readiness and quality of care, we found that availability of basic client services is not universal across provinces, especially STI services, which ranged from 63% to 82%. Availability of laboratory services ranged widely, from 32% in Province 7 to just 3% in Province 4, but Province 4 had the highest proportion of facilities meeting minimum standards of quality of care on all nine items, at 3% compared with the national average of about 1%. The percentage of facilities where clients reported having received all four specified ANC services was quite low, ranging from a high of 11% of clients in Province 5 to 2% in Province 3. Multivariate analysis showed that Province 5 had four and a half times higher odds of providing quality ANC services compared with Province 4, the reference. All provinces except Province 6 had statistically significant higher odds of providing quality family planning services. Provinces 3 and 6 had statistically significant higher odds of providing quality IMNCI services compared with Province 7, the reference. Province 6 had higher odds of disposing health care waste safely compared with Province 4, the reference.

Regarding child health care, 85% of health facilities offered all three basic services (outpatient curative care for sick children, growth monitoring, and child vaccination), with a range among provinces from 77% (Province 2) to 91% (Province 4). Key essential antibiotics such as amoxicillin and cotrimoxazole were much less readily available. More than 96% of the facilities in each of the seven provinces offered at least one modern method of temporary family planning, while the proportion of facilities offering male or female sterilization ranged from 23% (Province 4) to 53% (Province 6). In at least 89% of facilities every contraceptive method provided by the facility was available on the day of the survey in each of the seven provinces, with the highest proportion in Province 4, at 100%.

Regarding ANC, delivery, and newborn care services, at least 94% of facilities offered ANC services across all provinces. Nearly half of facilities nationwide provided normal vaginal delivery services, ranging from 23% of facilities in Province 2 to 83% in Province 6. The proportion of facilities providing medical abortion ranged from 13% in Province 7 to 42% in Province 2. The proportion of facilities with all essential medicines for newborns (tetracycline eye ointment, 4% chlorhexidine gel, injectable

gentamicin, ceftriaxone powder for injection, and amoxicillin suspension or dispersible pediatric dosed tablet) was less than 2% across all provinces.

Concerning services related to HIV/AIDS and sexually transmitted infections (STIs), 6% of facilities had an HIV testing system, either in the facility or through an external testing site, from 3% of facilities in Province 1 and 6 to 9% of facilities in Province 3. Among the facilities with an HIV testing system, the proportion with HIV testing capacity at the facility ranged from 73% (Province 2) to 94% (Province 5).

In relation to non-communicable diseases, the proportion of facilities diagnosing, prescribing treatment, and/or managing patients with diabetes ranged from 15% (Province 2) to 25% (Province 3). The percentage of facilities nationwide that reported offering services for cardiovascular diseases was over 73%, from 64% in Province 6 to 84% in Province 7. We found that 94% of facilities nationwide diagnose, prescribe treatment for, or manage patients with chronic respiratory diseases, with a range from 80% in Province 6 to 97% in Province 7.

Among all facilities, the proportion offering malaria diagnosis and treatment services ranged from 30% in Province 6 to 75% in Province 2. Over 90% of facilities across all provinces reported that they provide TB diagnostic or treatment and/or treatment follow-up services.

In summary, major gaps among provinces exist in diagnostic service availability in health posts; availability of key essential medicines for child health services; and ANC service readiness in terms of availability of guidelines, equipment, and essential medicines. There is also a considerable gap among the provinces in the quality of ANC, family planning, and IMNCI services. Availability of basic diagnostic tests varied by type of facility, with public and private level hospitals having higher odds of availability after adjusting for covariates. The way forward would be to focus on improving service availability and readiness in the lowest performing provinces and to keep up the standards in high performing provinces.

## Summary of Results of NHSS RF Indicators

NHSS RF Indicators		Provinces							National Average
		Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
1	Availability of tracer medicines (NHSS RF: OC1.4)	0.6	0.1	0.7	0.5	1.0	0.6	2.5	0.8
2	Sanctioned posts filled (NHSS RF: OP1b1.1) (All providers)	69.8	73.6	65.9	78.1	73.7	68.1	74.4	71.3
3	Timely supply of family planning commodities (NHSS RF: OP1c2.1)	82.1	72.4	85.7	84.4	75	97.8	77.3	81.7
4	Storage practice for medicines (NHSS RF: OP1c2.2) (all storage criteria met)	68.3	55.2	64.4	63.3	69	57.9	71.6	64.1
5	Health facilities meeting minimum standards of quality of care at point of delivery (NHSS RF: OC2.1)	0.0	0.0	0.8	3.2	0.3	0.3	0.2	0.7
6a	Provision of quality ANC services as per national standards (NHSS RF: OC2.2)	5.7	5.0	2.3	5.3	10.5	6.7	7.3	5.3
6b	Provision of quality family planning services as per national standards (NHSS RF: OC2.2)	9.0	8.5	8.1	1.3	12.3	4.9	27.5	9.9
6c	Provision of quality IMNCI services as per national standards (NHSS RF: OC2.2)	20.4	22.3	23.7	29.5	26.1	33.7	20.3	24
7a	Compliance with service delivery protocols/guidelines for ANC services (NHSS RF: OP2.1.1)	0.5	0.0	0.3	0.2	0.0	0.0	0.2	0.2
7b	Compliance with service delivery protocols/guidelines for family planning services (NHSS RF: OP2.1.1)	0.3	0.1	2.3	0.2	1.1	0.3	0.5	0.8
7c	Compliance with service delivery protocols/guidelines for IMNCI services (NHSS RF: OP2.1.1)	0.3	0.6	0.2	3.2	1.9	0.0	0.2	0.9
8	Laboratory diagnostic capacity - basic test (NHSS RF: OP2.1.3) (All basic tests - PHCCs and hospitals only included)	3.4	22.2	12.8	8.7	13.3	18.2	16.3	12.6
9	Segregation of waste (NHSS RF: OP2.3.1)	90.4	82.4	93.5	85.5	87.9	68.4	79.9	85.9
10	Safe disposal of health care waste (NHSS RF: OP2.3.2) (both sharps and medical waste)	81.9	74.0	82.3	63.9	80.6	81.6	74.8	77.4
11	Clients receiving free health care (NHSS RF: OC3.1)	83.7	95.3	70.4	86.4	92.3	77.0	87.6	85.9
12	Availability of basic client services (NHSS RF: OP3.1.1)	63.2	53.8	68.9	65.5	63.1	52.3	62.9	62
13	Comprehensive emergency obstetric and newborn care (CEmONC) sites (NHSS RF: OP3.1.3)	50.0	25.0	53.8	18.2	50.0	20.0	44.4	39.0
14	Health Posts with laboratory services (NHSS RF: OP5.1.2)	12.3	19	11.4	2.7	11.3	5.4	31.9	13.4





# 1 INTRODUCTION

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Timely and comprehensive information on service availability and readiness, including information on the quality of health services, is essential for effective management of health systems (WHO 2015). Such evidence also helps policymakers and program managers allocate resources more effectively to underserved areas.

The 2015 Nepal Health Facility Survey (2015 NHFS) is the first comprehensive assessment of health facilities in Nepal, combining the efforts of the Ministry of Health and Population (MoHP) and health development partners. The MoHP designed the survey to provide information on the availability of basic and essential health care services and the readiness of health facilities to provide quality services to clients. It also provides information on the following specific services: child health care, maternal and newborn care, family planning, services for sexually transmitted infections (STIs), HIV/AIDS, tuberculosis and malaria, and services for non-communicable diseases (NCDs) (specifically, diabetes, cardiovascular diseases, and chronic respiratory diseases).

The MoHP released the 2015 NHFS final report in January 2017 (Ministry of Health, New ERA et al. 2017). The final report provides representative results for the country as a whole, for different facility types—public hospitals, primary health care centers (PHCCs), health posts (HPs), urban health centers (UHCs), standalone HIV testing and counselling sites (HTCs), and private hospitals—for different managing authorities (government and private), for each of the three geo-ecological regions in the country. The survey was also designed to produce representative results for each of the 13 development-ecological regions.

Following release of the 2015 NHFS report, the MoHP identified the need to disaggregate NHFS results at the province level to allow policymakers to better determine how best to allocate available resources among the provinces. This was mainly required as the country entered to a new federal structure following the promulgation of the new constitution in Nepal on 20 September 2015. The MoHP especially through the Monitoring and Evaluation Technical Working Group (M&E TWG) designed the concept of this further analysis to meet that need. Accordingly, the MoHP with the support of DFID Nepal's Monitoring, Evaluation, and Operational Research (MEOR) project and ICF produced this report.

## 1.1 Objectives

The overall objective of this report is to provide health care delivery system program managers with information on the level of availability of basic and essential health services in Nepal's health facilities and the extent of preparedness of these facilities to provide quality health services in each of the seven provinces. The MoHP will use this information to better determine how to allocate government resources to provinces to improve the quality of services that health facilities provide. Policymakers and program managers from the provinces will use this information to better manage availability and readiness of health services, as well as quality of health services within their provinces.

## **1.2 Research Questions**

This report aims to answer the following research questions:

- What is the level of availability of basic and essential services in the health facilities by province in Nepal?
- What is the extent of preparedness of health facilities to provide quality health services by province in Nepal?

## **1.3 Structure of the Report**

The report is organized in 14 chapters. Chapter 1 presents the introduction and objectives; Chapter 2 is on methodology; Chapter 3 give the results on general service readiness; Chapter 4 on child health services; Chapter 5 on family planning services; Chapter 6 on antenatal care (ANC), Chapter 7 on delivery and newborn care, Chapter 8 on HIV/AIDS and STIs, Chapter 9 on NCDs; Chapter 10 on tuberculosis, Chapter 11 on malaria; and Chapter 12 on factors associated with selected service availability and readiness indicators. Chapter 13 presents discussion, and chapter 14 offers conclusions and recommendations. In each chapter, we present the results by province and by facility type or managing authority (public/private). We have included the results by facility type or managing authority but have not explained them in the text. This is to provide readers with an idea of the results on indicators by facility type at the national level, as the sample did not allow disaggregation by facility type within the provinces. Annex I provides some of the results for those indicators that are not included in the main body of the report, to give the complete results of 2015 NHFS by province.

## 2 METHODOLOGY

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### 2.1 Definition of Key Terms

The 2015 NHFS defined **service availability** as the availability of basic and essential services, including maternal and newborn care, child health care, family planning services, and reproductive health services, as well as services for major non-communicable diseases (NCDs) (namely diabetes, cardiovascular diseases, and chronic respiratory diseases) and selected infectious diseases (namely STIs, HIV/AIDS, tuberculosis, and malaria).

The survey defined **service readiness** as availability of i) basic amenities for client services, including regular electricity, water, toilets, private spaces for service provision, communication equipment, and transport for emergencies; ii) basic equipment for service provision, including scales for adults and children, thermometers, stethoscopes, blood pressure measuring apparatus, and a light source for client examinations; iii) equipment and supplies for standard precautions for infection control; iv) capacity to perform basic laboratory tests including general microscopy and tests for hemoglobin, blood glucose, urine protein, and urine glucose levels; and v) essential medicines as defined by the World Health Organization (WHO). The survey further defined **service-specific readiness** as the availability of i) essential equipment and supplies required for a specific service in a location that is accessible to provide that service, ii) personnel with relevant recent training to conduct the service, iii) relevant service delivery guidelines, iv) appropriate medicines and commodities to support those services, and v) laboratory capacity for conducting tests related to the services.

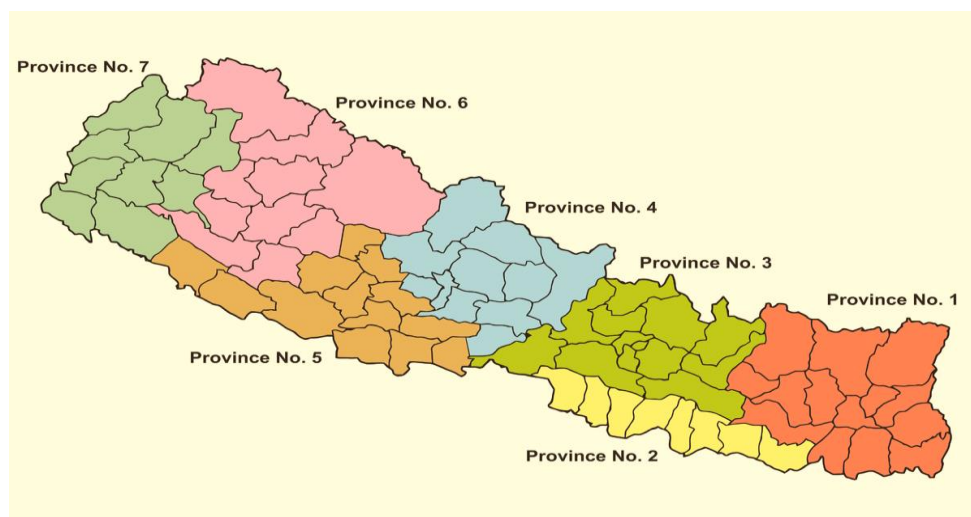
The 2015 NHFS measured **quality health services** against the standards of care for selected services as specified by the concerned departments and divisions of the MoHP and Department of Health Services (DoHS) (Ministry of Health, New ERA et al. 2017).

**Provinces** are new administrative structure of Nepal. Following the promulgation of the new constitution in Nepal on 20 September 2015, the country has a new federal structure. The 2015 NHFS was designed before this new structure, and thus it had collected data based on the previous administrative structure of the country, which had five development regions, 14 zones, and 75 districts. Based on three ecological zones (mountains, hills, and the Tarai) and five developmental regions (eastern, central, western, mid-western, and far-western), the country is considered to have 15 eco-developmental regions. The survey regrouped three mountain regions (western, mid-western, and far-western) into one because of their small number of health facilities, resulting in a total of 13 eco-developmental regions, which for the purposes of this report we call “domains”. With the new federal structure of the country, there are seven provinces<sup>1</sup>, which is basically a regrouping of the districts earlier divided into developmental regions. In Figure 1, we present the geographical boundaries of the seven provinces in the country. This report contains analysis disaggregated by province. The 2015 NSPA was designed to provide national-level representative results by facility type and by management authority, and for each of the 13 development-ecological regions (sample domains) in Nepal. Since the provinces are groups of development-ecological regions, data are therefore also representative at the provincial level.

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<sup>1</sup> En.wikipedia.org. (2017). *Nepalese Federal States*. [online] Available at: [https://en.wikipedia.org/wiki/Nepalese\\_Federal\\_States](https://en.wikipedia.org/wiki/Nepalese_Federal_States) [Accessed 21 Dec. 2017].

**Figure 1** Map of Nepalese provinces



## 2.2 Sample and Sampling Weights

The 2015 NHFS included a sample of 963 of the total 4,719 health facilities in Nepal (Ministry of Health, New ERA et al. 2017). The survey had set a total sample size of 1,000 health facilities, considering the implementing restrictions and the survey budget.

### 2.2.1 Sample of facilities

The 2015 NHFS included a census of all public hospitals (district level hospitals and zonal and above hospitals) and PHCCs. However, it only includes a sample of the other facilities. To select the sample, the survey implementation team first stratified by sample domain, then, facility type (government hospitals, private hospitals, PHCCs, UHCs, HPs, HTC) and managing authority (public and private) within 13 domains, and number of beds (e.g., 100+ and fewer than 100, where applicable within the domains). They then selected a random sample of 1,000 facilities (the final sample was 992 since 8 facilities were duplicates) with equal proportions coming from each of these strata.

### 2.2.2 Sample of health workers and clients

The survey included interviews with the following respondent types: health service providers; members of health facility operation and management committee (HFOMC); members of hospital development committees (HDC); and ANC, FP, sick childcare, and postpartum service clients. The survey aimed at interviewing an average of eight health service providers in each facility, to include providers of the range of services being assessed. The survey enumerators were supposed to interview all the providers present on the day of the visit when there were fewer than eight providers. The survey sampled 987 HFOMC and HDC members from 633 facilities.

Enumerators sampled ANC, FP, and sick childcare observations based on the number of clients present at each service site on the day of visit, with a maximum of 15 observations for each service in any given facility. Interviewers also conducted client exit interviews with the clients observed for these services. In addition, the enumerators selected a maximum of five postpartum women who were discharged on the day of the visit for postpartum exit interviews.

### **2.2.3 Sampling weights**

We applied the sampling weights for our analysis to ensure the actual representation of the survey results by facility type at the provincial and national level. To ensure representative results per domain, the 2015 NHFS designed a minimum sample size of 42 health facilities per domain. Within each domain, the health facilities were stratified by type. We used  $P_{1h}$  to represent the sampling probability of the health facilities in stratum  $h$ . The health facility design weight ( $W_h$ ) for all health facilities selected from stratum  $h$  is the inverse of the selection probability, as shown:

$$W_h = 1/P_{1h}$$

We adjusted the health facility design weight for non-response at the sampling stratum level to get the health facility sampling weight. We then normalized the sampling weight at the national level to get the health facility standard weight. We calculated the health service provider weight based on the facility standard weight multiplied by the inverse of the selection probability of providers from each facility and then adjusted for provider non-response and normalized. Further, we calculated the client weight (ANC visit weight, family-planning visit weight, and sick child visit weight) in the same way as the sample included for the observation and interviews. The final weight used in the analysis was the combined weight of the health facility design weight, provider weight, and the client weight.

## **2.3 Final Sample**

The 2015 NHFS final dataset includes data from: an inventory questionnaire for all 963 facilities visited; interviews of 4,057 service providers; interviews of 987 HFOMC and HDC members; 2,186 sick child care observations; 1,509 ANC client observations, 772 family planning client observations; exit interviews with the caretakers of the same sick children as well as the actual ANC clients, family planning clients, and 309 postpartum mothers. However, these numbers do not represent a census of health facilities, providers, or clients. As such, we applied sample weights to ensure the representativeness of our reported results.

### **2.3.1 Distribution of facilities**

During survey implementation, some of the 992 health facilities did not respond and/or did not exist, with a survey completion of 97.1% as Table 1 shows, resulting in a final sample of 963 health facilities (Table 2). Table 1 also shows the type of facilities sampled for the survey. In total, Province 3 was the province with the greatest number of health facilities sampled (223), and Province 6 had the lowest number of facilities sampled (78); again, this was simply due to random sampling within the domain and facility type strata. Table 2 provides the weighted number of facilities surveyed by each province.

**Table 1 Results of survey team contact with health facilities**

Distribution of sampled facilities by facility type and province according to the result of the visit of the survey team to the facility							
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 HTC	94.1	0.0	0.0	2.0	3.9	100.0	51
Other public hospitals	0.0	0.0	0.0	0.0	100.0	100.0	1
<b>Province</b>							
Province 1	97.2	0.0	0.0	0.0	2.8	100.0	178
Province 2	98.5	0.0	0.8	0.0	0.8	100.0	132
Province 3	96.4	0.0	0.9	0.0	2.7	100.0	223
Province 4	99.0	0.0	0.0	1.0	0.0	100.0	98
Province 5	97.5	0.0	0.0	0.6	1.9	100.0	157
Province 6	96.2	1.3	0.0	0.0	2.6	100.0	78
Province 7	95.2	0.0	0.0	1.6	3.2	100.0	126
National average	97.1	0.1	0.3	0.4	2.1	100.0	992

Note: Some of the rows may not add up to 100% due to rounding.  
Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Table 2 Distribution of surveyed facilities**

Distribution of surveyed facilities, by facility type and province			
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>Province</b>			
Province 1	17.2	166	173
Province 2	18.0	174	130
Province 3	19.9	192	215
Province 4	12.7	122	97
Province 5	15.0	144	153
Province 6	7.7	74	75
Province 7	9.5	92	120
National average	100.0	963	963

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

### 2.3.2 Distribution of providers and other respondents

#### Interviewed providers

Table 3 presents the number of interviewed service providers, both weighted and unweighted, in each of the seven provinces. As with the distribution of facilities, the greatest number of providers interviewed were in Province 3 (1,020) and the lowest number were from Province 6 (255), with a total of 4,057 providers interviewed nationwide.

**Table 3 Distribution of interviewed providers**

Distribution of interviewed providers, by facility type and province			
Background characteristics	Weighted percent distribution of interviewed providers	Number of interviewed providers	
		Weighted	Unweighted
<b>Facility type</b>			
Zonal and above hospitals	3.4	140	272
District level hospitals	5.9	241	593
Private hospitals	18.9	766	863
PHCCs	7.8	315	1,040
HPs	59.8	2,425	1,070
UHCs	1.7	67	74
Stand-alone HTC	2.6	103	145
<b>Province</b>			
Province 1	16.1	652	698
Province 2	17.0	690	505
Province 3	24.8	1,006	1,020
Province 4	11.6	469	406
Province 5	15.0	607	649
Province 6	5.5	225	255
Province 7	10.1	408	524
National average	100.0	4,057	4,057

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

### Interviewed HFOMC and HDC members

Table 4 includes sampled committee members by type. Province 1 had the highest number of HFOMC and HDC members interviewed (119), while Province 6 had the lowest number (54), out of 633 members interviewed nationwide.

**Table 4 Distribution of HFOMC and HDC member interviews**

Distribution and weighted and unweighted number of HFOMC and HDC members interviewed, by facility type and province					
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>Province</b>					
Province 1	18.0	211	206	124	119
Province 2	16.4	193	126	136	92
Province 3	17.0	201	152	129	105
Province 4	12.5	148	100	100	69
Province 5	16.7	197	174	123	109
Province 6	8.1	96	88	59	54
Province 7	11.2	131	141	79	85
National average	100.0	1,177	987	750	633

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

### Observed and interviewed clients

Table 5 presents the distribution of observed consultations and client exit interviews. The weighted distribution of percentage of observations of sick child visits shows that 26% were from Province 3, followed by 24% from Province 2. Provinces 4 and 6 had the smallest percentage (7%). Similarly, 34% of family planning consultations observed were from Province 3, and there were only 3% of consultations observed from Province 6. With regard to ANC consultations 32% of observed consultations were from Province 3, while only 4% were from Province 6. The same proportion of the service users were interviewed for these three service categories. (Note that the respondents of outpatient curative care for sick children were the caretakers of the sick children). The highest

proportion of postpartum mothers interviewed (36%) was from Province 3, while the lowest (6%) was from Province 6.

**Table 5 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 facility type and province

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>Province</b>			
Province 1	13.8	302	366
Province 2	24.2	530	370
Province 3	25.6	559	529
Province 4	7.3	160	177
Province 5	13.2	289	312
Province 6	6.9	150	161
Province 7	9.0	197	271
National average	100.0	2,186	2,186
<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>Province</b>			
Province 1	18.7	145	153
Province 2	16.2	125	109
Province 3	34.0	263	240
Province 4	7.4	57	37
Province 5	11.4	88	94
Province 6	3.2	24	34
Province 7	9.0	69	105
National average	100.0	772	772
<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>Province</b>			
Province 1	17.3	261	259
Province 2	20.5	309	253
Province 3	31.5	476	401
Province 4	6.0	90	108
Province 5	14.8	224	226
Province 6	3.5	53	74
Province 7	6.4	96	188
National average	100.0	1,509	1,509

Continued...



Table 6—Continued

Background characteristics	Percent distribution of observed consultations	Number of observed consultations	
		Weighted	Unweighted
POSTPARTUM MOTHER			
<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>Province</b>			
Province 1	7.9	24	41
Province 2	14.8	46	41
Province 3	35.7	110	82
Province 4	12.4	38	37
Province 5	15.6	48	56
Province 6	6.2	19	22
Province 7	7.3	23	30
National average	100.0	309	309

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 2.4 Data Analysis

Using the 2015 NHFS data, we created a new variable “Province” by combining the geographical territories that fall under each of the seven Nepalese provinces. We then used this variable to disaggregate results by province for service availability, service readiness, and quality of service provision to meet MoHP’s need, as explained in Chapter 1. Accordingly, we then generated descriptive results for the seven provinces. In addition to the descriptive analysis, we carried out multivariate analyses for five outcome variables of particular interest: provision of quality ANC services; provision of quality family planning services; provision of quality IMNCI services; availability of basic diagnostic tests; and safe disposal of health care waste. We fitted a logistic regression in Stata on each of the outcomes to examine whether the provincial differentials in outcomes changed after adjusting for a number of facility characteristics. These characteristics include ecological region, facility type, whether there was a management meeting in the health facility with community participation at least once every six months, whether the health facility engaged in regular quality assurance activities, and whether the facility provided training and personal supervision as a routine component.



### 3 FINDINGS ON GENERAL SERVICE READINESS AND QUALITY OF CARE

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#### Key Findings

- *Availability of basic client services is not universal across provinces, especially STI services, which ranged from 63% of facilities in Province 6 to 82% of facilities in Province 3.*
- *Province 3 had the highest proportion of facilities with safe final disposal of health care waste (82%), while Province 4 had the lowest proportion (64%).*
- *Availability of laboratory services among HPs ranged from a high of 32% in Province 7 to 3% in Province 4.*
- *Very few facilities had access to all 18 tracer drugs. Province 7 had all 18 tracer drugs available in only 2.5% of all facilities. The other provinces had 1% or less.*
- *Compared with the national average (<1%), Province 4 had a higher proportion (3%) of facilities meeting minimum standards of quality of care on all nine items.*
- *The percentage of facilities where clients reported having received all four specified ANC services was quite low, ranging from a high of 11% of clients in Province 5 to just 2% in Province 3.*
- *Province 7 had the highest percentage of pleased family planning clients, with clients at 28% of facilities reporting having received all five of the specified services, while Province 4 had the lowest proportion, at just 1%.*
- *Province 6 had the highest percentage of pleased IMNCI clients, with clients at 34%, of facilities reporting having received the specified IMNCI services. Provinces 1 and 7 had the lowest proportion, at 20%.*

In this chapter we present findings from the 2015 NHFS for general service readiness and quality of care, by facility type and province. The analysis focused on the 14 indicators (see Table 6) of the Nepal Health Sector Strategy Results Framework (NHSS RF) (Ministry of Health and Population 2015). The indicators are organized in the following areas: availability of services, service readiness, human resources available for providing health services, logistics management systems, quality of care, and provision of free health care. This chapter provides results on 13 of the 14 indicators. The 2015 NHFS collected information on all these areas through: 1) an inventory questionnaire for each facility in the sample; 2) health worker interview using a questionnaire for individual health workers; 3) observation of ANC, family planning, and sick child care services; and 4) exits interview with clients.

**Table 7 NHSS RF indicators captured by the 2015 NHFS**

NHSS RF Indicators	
1	Availability of tracer medicines (NHSS RF: OC1.4)
2	Sanctioned posts filled (NHSS RF: OP1b1.1)
3	Timely supply of family planning commodities (NHSS RF: OP1c2.1)
4	Storage practice for medicines (NHSS RF: OP1c2.2)
5	Health facilities meeting minimum standards of quality of care at point of delivery (NHSS RF: OC2.1)
6a	Provision of quality ANC services as per national standards (NHSS RF: OC2.2)
6b	Provision of quality family planning services as per national standards (NHSS RF: OC2.2)
6c	Provision of quality IMNCI services as per national standards (NHSS RF: OC2.2)
7a	Compliance with service delivery protocols/guidelines for ANC services (NHSS RF: OP2.1.1)
7b	Compliance with service delivery protocols/guidelines for family planning services (NHSS RF: OP2.1.1)
7c	Compliance with service delivery protocols/guidelines for IMNCI services (NHSS RF: OP2.1.1)
8	Laboratory diagnostic capacity - basic test (NHSS RF: OP2.1.3)
9	Segregation of waste (NHSS RF: OP2.3.1)
10	Safe disposal of health care waste (NHSS RF: OP2.3.2)
11	Clients receiving free health care (NHSS RF: OC3.1)
12	Availability of basic client services (NHSS RF: OP3.1.1)
13	Comprehensive emergency obstetric and newborn care (CEmONC) sites (NHSS RF: OP3.1.3)
14	Health Posts with laboratory services (NHSS RF: OP5.1.2)

### 3.1 Availability of Services

#### 3.1.1 Availability of basic client services

Table 7 presents the proportion of facilities offering basic client services, which according to the 2015 NHFS included child curative care, child growth monitoring, child vaccinations, any modern method of family planning, antenatal care, and services for STIs. These services are also the components of basic health care package as defined by the Nepal Health Sector Strategy (NHSS) and comprise one of the 14 NHSS RF indicators. Overall, while most facilities offered the majority of basic client services, the percentage that offered all was not as high. Specifically, the range of facilities with access to all the basic services ranged from 52% in Province 6 to 69% in Province 3. The greatest room for service improvements was in the area of STI services, where access ranged from 63% of Province 6 facilities to 82% of Province 3 facilities.

In the majority of the provinces, 100% of facilities had child curative care services. Similarly, more than 90% of all facilities in all provinces offered child growth monitoring services, except Province 2, with only 85% of facilities offering this service. Access to child vaccination services was not as widespread, with 87% of facilities nationwide offering this service. Province 7 had the greatest room for improvement in this area, with only 81% of facilities offering this service. All or almost all of the facilities in Provinces 2 and 4 through 7 provided access to modern methods of family planning, while this service was offered by a minimum of 96% of facilities in Provinces 1 and 3. Nearly all facilities in Provinces 1 and 3 through 7 offered ANC services, while only 94% of facilities in Province 2 offered ANC services.

**Table 8 Availability of basic client services**

Among all facilities, the percentages offering indicated basic client services and all basic client services, by facility type and province

Background characteristics	Child curative care	Child growth monitoring	Child vaccination <sup>1</sup>	Any modern methods of family planning <sup>2</sup>	Antenatal care	Services for STIs	All basic client services <sup>3</sup>	Number of facilities excluding HTCs <sup>4</sup>
<b>Facility type</b>								
Zonal and above hospitals	100.0	85.1	84.6	88.3	96.3	100.0	80.9	6
District level hospitals	98.7	96.1	89.5	100.0	98.7	98.7	85.5	16
Private hospitals	92.7	54.4	29.1	70.1	86.4	93.0	24.5	70
PHCCs	100.0	96.1	95.2	100.0	100.0	97.6	90.8	42
HPs	100.0	96.7	91.7	100.0	98.8	70.7	64.4	775
UHCs	98.1	76.5	81.8	100.0	96.8	51.0	33.4	32
<b>Province</b>								
Province 1	98.1	92.3	89.5	96.2	97.9	71.5	63.2	164
Province 2	100.0	85.3	83.6	98.1	94.3	67.1	53.8	171
Province 3	99.3	91.1	86.0	95.6	98.8	82.3	68.9	186
Province 4	100.0	99.3	91.4	100.0	99.1	74.1	65.5	119
Province 5	99.4	95.3	88.1	97.6	97.7	72.7	63.1	138
Province 6	99.7	98.1	86.7	100.0	99.4	63.2	52.3	74
Province 7	99.5	94.1	81.5	99.3	99.5	80.6	62.9	89
National average	99.4	92.7	86.8	97.7	97.8	73.5	62.0	940

<sup>1</sup> Facility routinely provides pentavalent, polio, measles-rubella (MR), and BCG vaccinations at the facility.

<sup>2</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), implants, intrauterine contraceptive device (IUCDs), the male condom, male sterilization or female sterilization.

<sup>3</sup> Includes outpatient curative care for sick children, child growth monitoring, child vaccination services, any temporary modern method of family planning, antenatal care, and services for sexually transmitted infections (STIs). These services also constitute the basic health care package of the Nepal health sector strategy (NHSS).

<sup>4</sup> This denominator applies only to the indicator "services for STIs". For the indicators "child curative care", "child vaccination," and "antenatal care services," Sukra Raj and Bir hospitals were also excluded from the denominator; for the indicator "child growth monitoring services," Sukra Raj hospital was excluded from the denominator, and for the indicator "any modern methods of family planning," Sukra Raj and Kanti hospitals were also excluded from the denominator.

Note: Some of the rows may not add up to 100% due to rounding  
Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 3.2 Service Readiness: Basic Facility to Support Quality Service Provision and Client Use of Services

In this section we report the results on 4 of the 14 NHSS RF indicators: waste segregation, safe disposal of health care waste, diagnostic capacity, and availability of essential medicines.

### 3.2.1 Waste segregation

Table 8 presents the proportion of facilities that segregate waste generated at the facility at the time of collection. Province 1 had the highest proportion of facilities that had appropriate waste segregation techniques (90%), and Province 6 the lowest (68%), with a national average of 86%.

**Table 9 Segregation of waste**

Among all facilities, the percentages reporting that they segregate waste generated at the facility at the time of collection, by facility type and province

Background characteristics	Percentages of facilities that segregate waste at time of collection	Number of facilities
<b>Facility type</b>		
Zonal and above hospitals	100.0	6
District level hospitals	92.1	16
Private hospitals	97.4	70
PHCCs	85.8	42
HPs	84.5	775
UHCs	85.6	32
Stand-alone HTC	88.1	23
<b>Province</b>		
Province 1	90.4	166
Province 2	82.4	174
Province 3	93.5	192
Province 4	85.5	122
Province 5	87.9	144
Province 6	68.4	74
Province 7	79.9	92
National average	85.9	963

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

### 3.2.2 Safe disposal of health care waste

Table 9 and Figure 2 present the proportion of facilities with proper disposal of sharps waste and other medical waste. Province 3 had the highest proportion of facilities with safe final disposal of sharps waste (90%), medical waste (87%), and both sharps and medical waste (82%). Province 4 had the lowest proportion of facilities with safe disposal of health care waste (64%).

**Table 10 Safe disposal of health care waste**

Among all facilities, percentages with proper disposal of sharps waste and proper disposal of other medical waste, by facility type and province

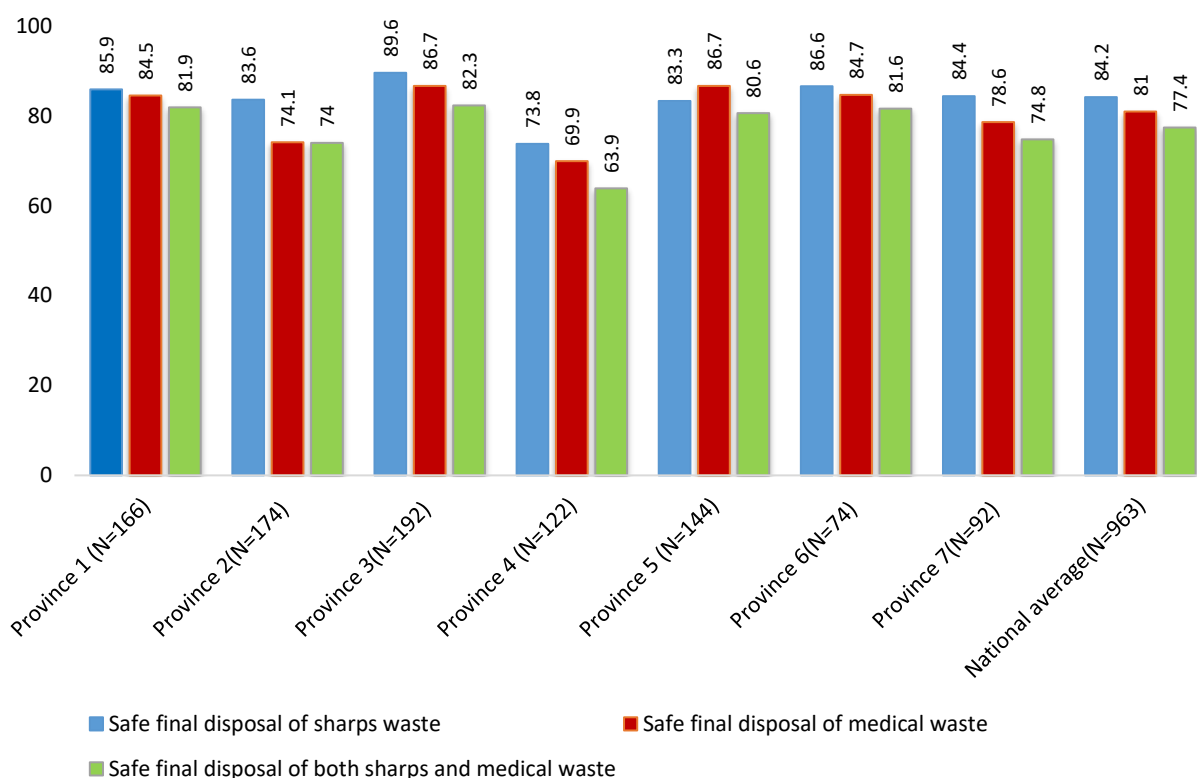
Background characteristics	Safe final disposal of sharps waste <sup>1</sup>	Safe final disposal of medical waste <sup>2</sup>	Safe final disposal of both sharps and medical waste	Number of facilities
<b>Facility type</b>				
Zonal and above hospitals	79.5	76.1	72.7	6
District level hospitals	88.2	80.3	77.6	16
Private hospitals	85.4	74.6	71.9	70
PHCCs	82.1	80.6	74.8	42
HPs	84.2	81.9	78.4	775
UHCs	82.1	74.9	69.4	32
Stand-alone HTC	85.7	80.7	78.0	23
<b>Province</b>				
Province 1	85.9	84.5	81.9	166
Province 2	83.6	74.1	74.0	174
Province 3	89.6	86.7	82.3	192
Province 4	73.8	69.9	63.9	122
Province 5	83.3	86.7	80.6	144
Province 6	86.6	84.7	81.6	74
Province 7	84.4	78.6	74.8	92
National average	84.2	81.0	77.4	963

<sup>1</sup> The process of sharps waste disposal is incineration, and the facility has a functioning incinerator with fuel on the day of survey, or else the facility disposes of sharps waste by means of open burning in a protected area, dumping without burning in a protected area, burning and then dumping, or removal offsite with storage in a protected area prior to removal offsite.

<sup>2</sup> The process of infectious waste disposal is incineration, and the facility has a functioning incinerator with fuel on the day of survey, or else the facility disposes of infectious waste by means of open burning in a protected area, dumping without burning in a protected area, burning and then dumping, or removal offsite with storage in a protected area prior to removal offsite.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Figure 2 Safe disposal of health care waste (%), by province**



### 3.2.3 Diagnostic capacity

#### Health posts with laboratory services

Table 10 presents the proportion of health posts (HPs) with their own laboratory services, according to reports by health service providers. We present the results on HPs with laboratory services separately because this was one of the 14 NHSS RF indicators as listed at the beginning of this chapter. In general, laboratory services were among the services with the greatest gap in availability, with a range among health posts from 32% in Province 7 to 3% in Province 4. The national average was 13% (Table 9, Figure 3).

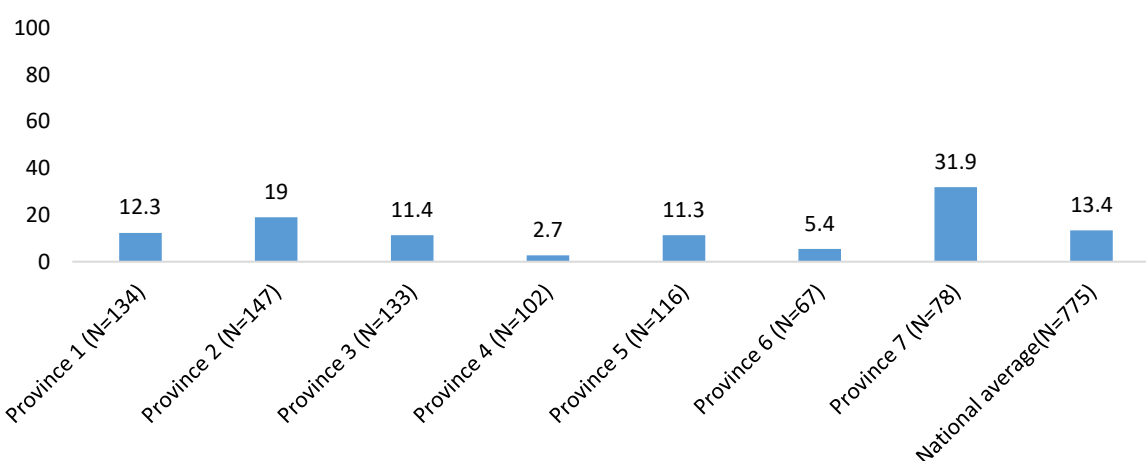
**Table 11 Health posts with laboratory services**

Among health posts, percentages that have their own laboratory services, by province		
Background characteristics	Percentages with laboratory services <sup>1</sup>	Number of health posts
<b>Province</b>		
Province 1	12.3	134
Province 2	19.0	147
Province 3	11.4	133
Province 4	2.7	102
Province 5	11.3	116
Province 6	5.4	67
Province 7	31.9	78
National average	13.4	775

<sup>1</sup> Facility reports that it has laboratory services, defined as conducting any tests at the facility, including any rapid diagnostic tests.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Figure 3 Health posts with laboratory services (%), by province**



### Laboratory diagnostic capacity for basic tests by background characteristics

Table 11 presents the proportion of facilities with the capacity to conduct basic laboratory diagnostic tests, such as hemoglobin, malaria diagnostic tests, urine protein tests, urine glucose tests, HIV diagnostic tests, syphilis rapid diagnostic tests, and urine pregnancy tests, according to reports by health providers and enumerator observations. Based on the results for PHCCs and hospitals (note that we only report on these two, as this indicator was not relevant for the other types of facilities), we found that Province 2 had the highest proportion of facilities with capacity to conduct all the above tests (22%), while only 3% of facilities in Province 1 had such capacity.

**Table 12 Laboratory diagnostic capacity - basic test**

Among all facilities, the percentages with capacity to conduct basic laboratory diagnostic tests in the facility, by managing authority and province

Laboratory tests	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
<b>Basic tests</b>										
Hemoglobin	9.3	76.0	15.2	12.2	24.3	12.6	15.5	9.1	14.9	15.7
Blood glucose	3.7	47.4	6.0	8.0	11.1	6.3	10.3	4.7	5.4	7.9
Malaria diagnostic test <sup>1</sup>	17.1	63.7	19.7	21.7	22.6	15.6	26.8	14.5	28.0	21.6
Urine protein <sup>2</sup>	7.4	74.1	13.6	12.1	19.8	11.9	13.8	7.2	12.6	13.8
Urine glucose <sup>3</sup>	7.1	74.5	13.0	12.0	20.1	11.7	12.6	7.5	12.6	13.5
HIV diagnostic test <sup>4</sup>	2.7	35.7	3.1	6.5	8.7	5.8	6.4	3.1	5.8	5.9
Syphilis rapid diagnostic test	5.6	70.1	11.0	10.7	16.6	12.1	11.8	6.9	9.0	11.8
Urine pregnancy test	25.4	75.6	30.0	23.2	44.0	26.5	23.2	29.9	31.1	30.2
Number of facilities	871	92	166	174	192	122	144	74	92	963
All items	10.3	14.8	3.4	22.2	12.8	8.7	13.3	18.2	16.3	12.6
Number of PHCCs and hospitals	64	70	24	20	42	14	18	7	9	134

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

DBS = dried blood spot; CSF = cerebrospinal fluid; CT = computed tomography.

<sup>1</sup> Facility reports that it conducts malaria testing at the facility and had unexpired malaria rapid diagnostic test kits available at the facility, or else facility had a functioning microscope, glass slides with covers and appropriate reagents available on the day of the survey for malaria microscopy.

<sup>2</sup> Facility reports that it conducts urine protein test at the facility and had at least one unexpired urine protein dipstick available at the facility.

<sup>3</sup> Facility reports that it conducts urine glucose test at the facility and had at least one unexpired urine glucose dipstick available at the facility.

<sup>4</sup> Facility reports that it conducts HIV testing at the facility and had HIV rapid diagnostic test capacity at the facility (at least one unexpired screening HIV RDT kit, at least one unexpired confirmatory HIV RDT kit, and at least one unexpired tiebreaker HIV RDT kit all available somewhere at the facility), or else facility had an ELISA scanner or reader and a plate washer and ELISA assay kit and an incubator for HIV testing all available and working; or dynabeads with vortex mixer or western blot all available on the day of the survey.

<sup>5</sup> Facility reports that it conducts syphilis test at the facility and had at least one unexpired syphilis rapid diagnostic test kit available at the facility on the day of the survey.

<sup>6</sup> Facility reports that it conducts urine pregnancy test at the facility and had at least one unexpired urine pregnancy rapid diagnostic test kit available at the facility on the day of the survey.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data



### 3.2.4 Availability of essential medicines

#### Availability of tracer medicines

Table 12 presents the proportion of facilities with the tracer medicines observed to be available in the facility on the day of the survey, according to direct enumerator observations. In general, we found that very few facilities had access to all 18 tracer drugs. Province 7 had all 18 tracer drugs available in 2.5% of all facilities, which was the province with the highest percentage available. The other provinces had only 1% or less, with a national average of <1%. Despite these low numbers, some of the medicines such as albendazole, amoxicillin, iron folic acid tablets, metronidazole tablets/syrup, oxytocin injections, zinc sulphate tablets, and vitamin A tablets were available in more than 80% of facilities across all seven provinces. The main drugs that appeared to be missing from the majority of facilities were: benzoic acid compound ointments, chloramphenicol capsules/ointments, ciprofloxacin (infusion, eye/ear drop), and RHZ (isoniazid + rifampicin + pyrazinamide).

**Table 13 Availability of tracer medicines**

Among all facilities, percentages with indicated tracer medicines available in the facility on the day of the survey, by managing authority and province

Tracer medicines	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
<b>Essential medicines</b>										
Albendazole	99.1	75.7	97.4	95.9	95.9	100.0	98.2	96.8	98.7	97.4
Amoxicillin tab/cap	89.6	71.3	89.8	86.4	91.8	81.9	85.1	96.9	87.9	88.3
Benzoic acid compound ointment	53.6	35.7	47.3	58.6	56.1	58.9	55.2	38.1	39.2	52.2
Chloramphenicol caps/application	37.9	28.7	41.3	33.3	40.5	40.3	33.5	28.4	39.0	37.2
Ciprofloxacin infusion/ear/eye drop	54.8	72.3	59.4	33.7	72.8	79.1	54.6	40.9	42.6	56.1
Cotrimoxazole suspension or dispersible pediatric dozed tablet	50.9	23.1	46.4	40.3	54.1	45.8	58.1	37.4	57.5	48.8
Iron + folic acid combination tablet	92.4	67.9	95.7	70.3	93.6	98.5	97.5	94.0	89.3	90.6
Gentamycin injection	63.5	64.4	65.6	55.2	46.8	69.4	61.2	86.6	87.6	63.6
Metronidazole tab/syrup	96.8	72.9	94.6	97.9	96.2	98.5	92.6	79.4	99.8	95.0
ORS	93.3	77.8	94.8	83.3	94.2	96.2	96.4	92.0	88.2	92.2
Oxytocin injection (or other uterotonic) <sup>1</sup>	94.1	93.6	87.2	98.4	90.6	100.0	98.5	89.1	98.3	94.1
Paracetamol tab/inj	99.4	73.3	96.3	96.0	96.4	99.8	98.4	97.5	99.5	97.4
Povidone iodine solution	91.8	67.6	87.6	93.8	90.5	90.3	89.2	89.3	87.4	90.0
Salbutamol tab or inhaler	78.2	68.0	77.9	69.7	84.7	85.4	85.6	47.2	77.6	77.4
Zinc sulphate tab	98.1	61.3	93.6	96.7	90.2	99.5	96.3	96.5	99.1	95.4
Isoniazid + Rifampicin + Pyrazinamide (RHZ) <sup>2</sup>	23.5	9.8	15.3	17.0	20.6	18.4	38.3	28.1	24.2	22.4
Ringers Lactate	84.8	73.5	84.5	78.0	81.6	92.2	77.9	91.5	91.1	83.9
Vitamin A	93.1	41.0	89.2	87.1	87.4	96.2	93.8	81.2	88.0	89.3
All 18 tracer medicines available	0.7	1.2	0.6	0.1	0.7	0.5	1.0	0.6	2.5	0.8
Number of facilities	871	70	164	171	186	119	138	74	89	940
Number of facilities offering normal delivery services	413	45	78	39	82	66	63	62	67	457
Number of facilities offering tuberculosis diagnosis and/or treatment services	814	68	138	167	173	117	134	67	87	882

Note: This table excludes stand-alone HTC sites.

<sup>1</sup> Oxytocin or other uterotonic are assessed only in facilities that offer normal delivery services.

<sup>2</sup> RHZ is assessed only in facilities that provide TB diagnosis or treatment services.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

### 3.3 Availability of Human Resources for Health

#### 3.3.1 Sanctioned posts filled

Table 13 depicts the proportion of sanctioned MoHP posts filled—indicating the filled human resource (specialists, doctors, nurses, paramedics—out of the number of posts sanctioned for the specific level of health facility, according to reports of facility managers and/or human resources managers, for the indicated provider categories among all government facilities. The 2015 NHFS assessed the availability of health workers at various levels of the health care delivery system, and this is one of the 14 NHSS RF indicators captured by 2015 NHFS. While the MoHP sanctions a certain number of health workers by facility level, it is quite common that not all sanctioned posts are filled for reasons such as inadequate human resources and non-preference of health workers to work in remote areas. The NHFS 2015 data show that the proportion of sanctioned MoHP posts filled for all providers was similar across the seven provinces, with the highest proportion being 78% for Province 4 and the lowest proportion being 66% for Province 3, with a national average of 71%.

**Table 14 Sanctioned posts filled**

Among all government facilities, percentages of sanctioned MoHP posts filled for the indicated provider categories, by facility type and province						
Provider	Consultant	MD-GP	MO	Nurse	Paramedic <sup>1</sup>	All providers <sup>2</sup>
<b>Facility type</b>						
Zonal and above hospitals	48.4	63.2	57.6	73.0	80.6	68.7
District level hospitals	-	51.9	57.6	78.5	80.5	64.3
PHCCs	-	-	50.7	79.1	83.0	78.0
HPs	-	-	-	70.7	73.1	72.2
UHCs	-	-	-	35.7	28.6	31.8
<b>Province</b>						
Province 1	54.3	64.3	57.5	75.9	75.1	69.8
Province 2	24.0	63.6	47.2	71.1	77.5	73.6
Province 3	48.8	61.5	62.7	70.2	63.8	65.9
Province 4	67.9	63.6	59.8	74.1	83.1	78.1
Province 5	75.9	50.0	48.2	70.5	77.8	73.7
Province 6	33.3	33.3	63.9	67.7	69.1	68.1
Province 7	7.9	40.0	34.4	75.1	78.4	74.4
National average	48.4	56.5	55.9	72.1	74.3	71.3

Note: This table excludes stand-alone HTC sites.

Note: The numbers shown in this table were provided by the facility in-charge or by the human resources manager wherever applicable.

<sup>1</sup> Paramedic includes the following cadres: Health Assistant (HA), Auxiliary Health Worker (AHW), Senior Auxiliary Health Worker (SAHW), public health inspector, laboratory technologist, laboratory officer, laboratory technician, laboratory assistant, radiographer, and dark room assistant.

<sup>2</sup> Includes the following cadres: Consultants, Doctor of Medicine in General Practice (MD-GP), Medical Officer (MO), nurse and paramedics.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

### 3.4 Logistics Management System

The 2015 NHFS measured three aspects of the logistics management system: storage practices of medicines, status of logistics management information systems (LMIS) (status of recording, reporting, availability of designated LMIS focal person, availability of LMIS guidelines) within the facilities, and timely supply of family planning commodities. Here we report on the first and third of these criteria based on the NHSS RF indicators.

#### 3.4.1 Storage practice of medicines

Table 14 shows the percentage of facilities that engage in best practices for storage of medicines, according to enumerator observations. Specifically, Table 13 shows the percentage of facilities that keep medicines off the floor; protected from water; protected from the sun; organized by first expired, first out (FEFO); and whether the storage room is free of rodents and well ventilated. Province 7 had the highest proportion of facilities that met all best practices in the appropriate storage of medicines (72%), and Province 2 the lowest (55%), with a national average of 64%.

**Table 15 Storage practice for medicines**

Among all facilities, percentages demonstrating good storage practices for stored medicines, by facility type and province

Background characteristics	Percentages of facilities that store antibiotics and other medicines where:							Number of facilities
	Medicines are off the floor	Medicines are protected from water	Medicines are protected from the sun	Storage room clean of rodents	Storage room well ventilated	All medicines are stored by FEFO <sup>1</sup>	All storage criteria met <sup>2</sup>	
<b>Facility type</b>								
Zonal and above hospitals	86.1	96.6	93.2	86.1	89.5	89.8	75.8	6
District level hospitals	92.1	97.4	100.0	85.5	90.8	92.1	71.1	16
Private hospitals	74.7	76.0	73.6	76.0	72.0	66.8	59.8	70
PHCCs	96.6	99.0	97.6	88.4	86.3	95.6	75.6	42
HPs	94.5	95.2	96.8	78.8	81.4	88.4	63.2	775
UHCs	94.8	91.9	94.8	81.7	88.7	91.9	70.7	32
Stand-alone HTCcs	75.1	75.1	74.2	74.2	69.8	74.2	68.9	23
<b>Province</b>								
Province 1	95.2	93.5	92.3	80.1	83.7	89.2	68.3	166
Province 2	91.5	91.5	95.4	69.1	83.5	83.7	55.2	174
Province 3	88.6	91.6	91.9	76.3	78.6	89.8	64.4	192
Province 4	91.1	94.7	93.5	76.3	75.6	87.5	63.3	122
Province 5	93.0	93.2	96.9	86.8	85.2	82.1	69.0	144
Province 6	96.6	96.0	98.9	86.2	80.5	83.2	57.9	74
Province 7	97.0	98.0	97.7	88.7	78.6	93.4	71.6	92
National average	92.7	93.5	94.6	79.2	81.1	87.0	64.1	963

<sup>1</sup> FEFO stands for First Expired, First Out.

<sup>2</sup> Medicines are off the floor, protected from water, protected from the sun, storage area is clean of evidence of rodents, storage room is well ventilated, and medicines are stored by FEFO.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

### 3.4.2 Timely supply of family planning commodities

Table 15 presents the proportion of facilities that report offering any type of modern family planning method and that report receiving their orders of family planning commodities such as condoms, oral contraceptive pills, implants, and IUCDs, within two weeks of placing the orders. The highest proportion of facilities reporting that they receive orders within two weeks of placing an order was in Province 6 (98%). In Province 2 only 72% of facilities reported the same, with a national average of 82%.

**Table 16 Timely supply of family planning commodities**

Among facilities offering any modern family planning methods that determine and order their contraceptive commodities, percentages reporting that they receive their orders within two weeks of placing the order, by facility type and province

Background characteristics	Percentages that receive orders within 2 weeks of placing order	Number of facilities offering any modern family planning methods that determine and order their own family planning commodities
<b>Facility type</b>		
Zonal and above hospitals	100.0	5
District level hospitals	85.9	13
Private hospitals	96.7	39
PHCCs	77.5	29
HPs	80.3	607
UHCs	90.7	27
<b>Province</b>		
Province 1	82.1	131
Province 2	72.4	106
Province 3	85.7	147
Province 4	84.4	96
Province 5	75.0	103
Province 6	97.8	67
Province 7	77.3	70
National average	81.7	720

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

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

### 3.5 Quality of Care

Quality of care is the central focus of the NHSS 2015-2020 and the 2014 National Health Policy. The 2015 NHFS assessed quality of care through three different indicators: health facilities meeting minimum quality-of-care standards (as defined in section 3.5.1, below); facilities complying with service delivery standards, protocols, and guidelines (as defined in section 3.5.2, below); and facilities providing quality services (as defined in section 3.5.3, below). We present the findings for minimum standard of quality of care as assessed by the health facility inventory, health provider interviews, and observation protocols; compliance with service standards as assessed through observation of client consultations; and provision of quality services in three areas (ANC, family planning, and IMNCI) as assessed through the client exit interview.

#### 3.5.1 Minimum standard of quality of care

Table 16 presents the proportion of facilities meeting the minimum standard of quality of care at point of service delivery. The 2015 NHFS considered the following nine items as the key components of quality of care: availability of soap and running water or alcohol-based hand disinfectant; safe final disposal of infectious waste; availability of disinfecting or sterilization equipment and knowledge of processing time, trained staff on infection control; quality assurance guidelines; clinical protocols; availability of four tracer items (regular electricity, improved water source, visual and auditory privacy, and client latrines); a waiting room; and availability of tracer medicines—amoxicillin or cotrimoxazole and gentamycin, oral rehydration salts (ORS), zinc tablets, iron and folic acid, albendazole, and at least three family planning methods. Information on most of these items came from the enumerator observations, and some from interviews with health service providers. Overall, very few facilities met the minimum criteria for quality of care. Compared with the national average (<1%), Province 4 had a higher proportion of facilities (3%) meeting minimum standards of quality of care on all nine items. We also found a wide range on the percentage of facilities with access to soap and running water or alcohol-based hand disinfectant, with only 32% of facilities in Province 2 having access to these items compared with 70% of facilities in Province 4.

**Table 17 Health facilities meeting minimum standards of quality of care at point of delivery**

Among all facilities, the percentages of facilities meeting minimum standard of quality of care at point of service delivery, by facility type and province

Background characteristics	Soap and running water or alcohol-based hand disinfectant	Safe final disposal of infectious waste <sup>1</sup>	Equipment and knowledge of processing time <sup>2</sup>	Trained staff <sup>3</sup>	QA guideline "Swasthya sewako gunasthar sudhar paddhatee" <sup>4</sup>	Clinical Protocol observed <sup>5</sup>	Availability of all four tracer amenities <sup>6</sup>	Waiting room	Tracer medicine <sup>7</sup>	All nine items	Number of facilities
<b>Facility type</b>											
Zonal and above hospitals	93.2	76.1	93.2	100.0	3.4	23.9	79.2	100.0	20.8	0.0	6
District level hospitals	69.7	80.3	86.8	100.0	14.5	23.7	76.3	93.4	60.5	3.9	16
Private hospitals	85.5	74.6	97.8	76.7	6.4	4.1	84.5	98.1	36.5	0.0	70
PHCCs	64.6	80.6	82.1	100.0	4.4	29.6	61.1	95.2	39.3	0.5	42
HPs	51.2	81.9	59.4	92.8	5.8	31.6	22.7	76.5	32.7	0.7	775
UHCs	50.6	74.9	54.9	86.1	0.0	4.9	10.0	65.2	5.5	0.0	32
<b>Province</b>											
Province 1	59.5	84.7	59.3	84.9	3.2	14.6	39.0	91.9	31.1	0.0	164
Province 2	32.1	74.4	51.4	94.9	1.5	17.8	14.0	68.3	21.0	0.0	171
Province 3	63.3	86.6	76.2	92.4	3.6	23.7	33.9	75.6	29.4	0.8	186
Province 4	70.3	69.2	77.0	90.2	5.3	39.3	31.4	72.1	47.2	3.2	119
Province 5	65.3	87.4	52.3	95.9	14.1	48.0	27.0	88.4	33.8	0.3	138
Province 6	45.6	84.7	52.8	88.3	9.3	40.0	28.1	77.5	28.8	0.3	74
Province 7	43.6	78.3	79.0	96.5	7.3	28.8	38.4	78.9	47.7	0.2	89
National average	54.9	81.0	63.8	91.9	5.7	28.4	29.8	79.0	32.8	0.7	940

Note: Excluded stand-alone HTC.

<sup>1</sup> The process of infectious waste disposal is incineration, and the facility has a functioning incinerator with fuel on the day of survey, or else the facility disposes of infectious waste by means of open burning in a protected area, dumping without burning in a protected area, burning and then dumping, or removal offsite with storage in a protected area prior to removal offsite.

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

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

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

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

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

<sup>3</sup> Facility has at least one ever-trained staff on Infection prevention or child health or newborn or delivery or ANC or PNC or FP available on the day of survey.

<sup>4</sup> Facility has Swasthye Sewako Gunasthar Sudhar Padhatee available on the day of survey.

<sup>5</sup> Facility has National Medical standard contraceptive services volume I or other job aids on family planning and RH clinical protocol for medical officers, staff nurses, ANM or any other ANC guidelines like Maternity guideline/National medical standard volume III or IEC materials related to ANC or Maternal Health Register and IMNCI guidelines or any guidelines for the diagnosis and management of childhood illness available on the day of survey.

<sup>6</sup> Facility has regular electricity, improved water source, visual and auditing privacy, and client latrine. Regular electricity means that 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. Improved water source means: 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. Visual and auditing privacy means: 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. Client latrine means: the facility had a functioning flush or pour-flush toilet, a ventilated improved pit latrine, or composting toilet.

<sup>7</sup> Facility was observed to be available of all those tracer medicine amoxicillin or cotrimoxazole and gentamycin and ORS and zinc and at least 3 family planning methods and iron and folic acid and albendazole on the day of survey.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

### 3.5.2 Compliance with service standards

#### Antenatal care services

Table 17 presents the proportion of facilities complying with ANC service delivery standard protocols/guidelines, as defined by the MoHP and observed by enumerators. Overall, the percentage of facilities meeting the requirements was quite low for all five items that make up this standard (observed maintaining healthy pregnancy, provider wrote on the client health card, client counselled about at least three danger signs they should watch for, blood pressure and weight measured, and iron supplementation given/prescribed). The national average was less than 1% and so was the proportion across all seven provinces.

**Table 18 Health facilities complying with service delivery standard protocols/guidelines for antenatal care services**

Among all facilities, the percentages of facilities complying with ANC service delivery standard protocols/guidelines, by facility type and province							
Background characteristics	Maintaining a healthy pregnancy was observed <sup>1</sup>	Provider wrote on the client health card	Client counselled on at least three danger signs	BP and weight measured	Iron supplementati on given/ prescribed	All five items	Number of facilities
<b>Facility type</b>							
Zonal and above hospitals	22.3	73.6	11.0	62.6	73.6	7.3	6
District level hospitals	18.4	86.8	7.9	76.3	80.3	3.9	16
Private hospitals	0.6	37.3	1.9	32.0	28.4	0.0	70
PHCCs	11.2	70.9	2.9	60.1	60.2	1.5	42
HPs	5.5	28.1	1.7	24.9	24.5	0.0	775
UHCs	0.6	12.6	0.6	12.6	5.4	0.6	32
<b>Province</b>							
Province 1	7.1	32.6	1.3	25.6	29.1	0.5	164
Province 2	5.5	34.3	0.8	28.2	32.4	0.0	171
Province 3	6.9	32.6	4.8	29.6	25.6	0.3	185
Province 4	0.5	15.6	0.2	14.9	15.3	0.2	119
Province 5	9.9	34.0	0.3	34.6	33.4	0.0	138
Province 6	0.6	24.7	0.0	22.6	25.5	0.0	74
Province 7	4.0	44.8	5.2	37.3	22.5	0.2	89
National average	5.5	31.5	1.9	27.7	27.0	0.2	940

Note: Excluded stand-alone HTCs, Sukra Raj and Bir hospitals.

<sup>1</sup> Maintaining Healthy pregnancy includes discussed nutrition during pregnancy and informed the client about the progress of the pregnancy and discussed the importance of at least 4 ANC visits.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## Family planning services

Table 18 presents the proportion of facilities complying with family planning service delivery protocols/guidelines, as measured by enumerators observing family planning visits and looking for five items: privacy confidentiality maintained, provider wrote on the client health card, client counselled on side effects of the family planning method offered, client informed about the family planning options, and blood pressure measured. Very few facilities met the five standards for this area—only 1% of facilities nationwide. Public hospitals performed better in this area than other types of facilities, though none of them performed well.

**Table 19 Health facilities complying with service delivery standard protocols/guidelines for family planning services**

Among all facilities, the percentages of facilities complying with family planning service delivery standard protocols/guidelines, by facility type and province

Background characteristics	Privacy and confidentiality maintained was observed <sup>1</sup>	Provider wrote on the client health card	Client counselled on side effects	Client informed about the choices	Blood pressure measured	All five items	Number of facilities
<b>Facility type</b>							
Zonal and above hospitals	11.0	62.6	36.9	33.3	51.6	7.3	6
District level hospitals	9.2	68.4	27.6	21.1	56.6	6.6	16
Private hospitals	0.8	7.7	2.3	1.4	5.5	0.8	70
PHCCs	5.8	57.3	21.3	18.4	38.3	2.4	42
HPs	2.9	29.7	5.1	3.0	18.1	0.5	775
UHCs	1.3	37.1	10.0	9.4	19.4	0.0	32
<b>Province</b>							
Province 1	2.7	35.9	7.0	6.1	24.5	0.3	164
Province 2	0.2	30.7	3.9	1.7	14.3	0.1	171
Province 3	8.1	39.6	9.6	6.5	31.4	2.3	185
Province 4	0.2	18.0	1.7	1.2	14.5	0.2	119
Province 5	1.8	31.1	9.0	5.2	15.8	1.1	138
Province 6	6.7	17.6	1.7	1.4	8.4	0.3	74
Province 7	0.7	26.8	8.9	6.4	11.8	0.5	89
National average	3.0	30.4	6.3	4.3	19.0	0.8	940

Note: Excluded stand-alone HTCs, Sukra Raj and Bir hospitals.

<sup>1</sup> Privacy/confidentiality includes ensured visual privacy and ensured auditory privacy and assured the client orally of confidentiality.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## Integrated maternal neonatal and childhood illness services

Table 19 shows the proportion of facilities complying with IMNCI service delivery standards, as measured through enumerator observations of five practices during neonatal care and child care visit observations, specifically: provider asked about client's complaints, completed a physical examination of the child, wrote on the client health card, advised on continued feeding, and advised on signs and symptoms to watch for that would indicate the need to immediately bring back the child. Only about 1% of facilities nationwide met these criteria, suggesting significant room for improvement with integrated maternal neonatal and childhood illness care.

**Table 20 Health facilities complying with service delivery standard protocols/guidelines for IMNCI services**

Among all facilities, the percentages of facilities complying with IMNCI service delivery standard protocols/guidelines, by facility type and province

Background characteristics	Provider asked about client's complaints <sup>1</sup>	Physical examination <sup>2</sup>	Provider wrote on client health card	Advised on continue feeding	Advised on signs and symptoms to immediately bring back the child	All five items	Number of facilities
<b>Facility type</b>							
Zonal and above hospitals	14.7	55.3	66.3	58.7	29.6	3.7	6
District level hospitals	1.3	55.3	89.5	52.6	25.0	0.0	16
Private hospitals	1.2	28.3	30.0	25.8	13.9	0.9	70
PHCCs	4.4	46.5	72.2	41.2	19.4	1.5	42
HPs	3.1	32.0	43.1	32.1	7.6	0.9	775
UHCs	0.0	12.7	32.2	14.3	9.4	0.0	32
<b>Province</b>							
Province 1	6.3	27.6	43.3	27.3	10.9	0.3	164
Province 2	0.8	23.5	40.6	29.2	5.2	0.6	171
Province 3	0.7	30.5	42.9	28.8	11.6	0.2	185
Province 4	4.4	37.8	50.9	32.3	6.0	3.2	119
Province 5	3.5	36.3	42.8	28.3	11.3	1.9	138
Province 6	5.2	43.5	37.6	35.7	4.3	0.0	74
Province 7	0.7	37.9	52.0	54.2	12.5	0.2	89
National average	2.9	32.2	44.0	31.9	9.1	0.9	940

Note: Excludes stand-alone HTC, Sukra Raj and Bir hospitals.

<sup>1</sup> Provider asked about clients compliments means whether a provider asked or the caretaker mentioned about the "main symptoms of diarrhea" and "general danger signs like child is unable to drink or breast feed" and "child has had convulsions with the current illness" and "cough or difficult breathing" or counted respiration for 60 seconds in physical examination.

Note: Here provider asked cough and difficult breathing is for the child of 2-59 months and counted respiration (breaths) for 60 seconds is done for child below 2 months as per IMNCI protocol.

<sup>2</sup> Provider performed the physical examination such as took child's temperature by thermometer or felt the child for fever or body hotness and weight the child on the day of visit.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

### 3.5.3 Provision of quality services as per national standards

#### Antenatal care services

Table 20 presents the proportion of clients provided with quality ANC services as per national standards among all ANC clients observed. Nationwide, a total of 5% of ANC clients received quality services across the four items assessed in the survey: ANC services received by a skilled birth attendant (SBA) (as determined through direct observations), clients reporting having been counselled on at least three signs of danger of the pregnancy, clients having recommended the facility to others, and clients reporting not having problems regarding wait time. As with other ANC service observations, the percentage of facilities where clients reported having received all four of these services was quite low, ranging from a high of 11% of clients in Province 5 to just 2% in Province 3.

**Table 21 Provision of quality antenatal care services as per national standards**

Among all ANC clients observed, the percentages of clients provided with quality services as per national standard, by facility type and province

Background characteristics	Clients received ANC services by a SBA trained provider <sup>1</sup>	Client reported on at least three danger signs	Client recommended the facility to others	Client reported no problems regarding waiting time	All four items	Number of ANC clients
<b>Facility type</b>						
Zonal and above hospitals	19.3	21.0	92.9	36.3	0.3	176
District level hospitals	56.5	17.4	96.5	67.1	5.4	247
Private hospitals	20.5	23.3	96.3	60.7	3.3	292
PHCCs	71.5	14.9	95.6	76.2	6.8	172
HPs	47.3	18.6	98.7	77.1	7.4	610
UHCs	34.0	16.4	100.0	85.4	0.0	5
<b>Province</b>						
Province 1	34.3	16.5	96.6	63.6	5.7	261
Province 2	54.8	9.4	95.5	70.6	5.0	309
Province 3	31.2	21.3	96.7	60.9	2.3	476
Province 4	47.2	34.7	99.1	83.6	5.3	83
Province 5	62.2	21.5	97.7	68.0	10.5	224
Province 6	32.2	38.5	100.0	85.8	6.7	53
Province 7	45.7	17.8	97.0	74.4	7.3	96
National average	43.0	19.2	96.8	67.4	5.3	1,502

Note: Excluded stand-alone HTCs, Sukra Raj and Bir hospitals.

<sup>1</sup> This applies to only providers who were observed at the facility.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## Family planning services

Table 21 presents the proportion of clients provided with quality services as per national standards among all family planning clients observed. Overall, 10% of health facility clients met the criteria for having received quality services, which included five items: clients observed to have received services by a provider trained in family planning, clients reporting haven been counselled on side effects of their selected family planning method, clients reporting being told what to do if any problems occurred and when to return for follow-up, clients reported having recommended the facility to others, and clients reporting not having any problems regarding wait time. Province 7 had the highest percentage of pleased clients, with clients at 28% of facilities reporting receiving all five of these services, and Province 4 had the lowest, at just 1%.

**Table 22 Provision of quality family planning services as per national standards**

Among all family planning clients observed, the percentages of clients provided with quality services as per national standard, by facility type and province

Background characteristics	Clients received services by a FP trained provider <sup>1</sup>	Clients reported being counselled on side effects	Client told what to do if any problems occurred and when to return for follow up	Client recommended the facility to others	Client reported no problems regarding waiting time	All five items	Number of family planning clients
<b>Facility type</b>							
Zonal and above hospitals	58.1	35.6	34.9	98.0	81.2	23.6	38
District level hospitals	50.8	31.5	30.7	97.4	69.9	7.7	62
Private hospitals	47.9	37.9	21.1	95.7	84.0	4.3	17
PHCCs	66.5	40.8	37.4	99.2	81.0	18.6	81
HPs	52.3	30.1	26.6	98.4	81.7	7.6	544
UHCs	60.5	43.8	38.4	100.0	82.1	18.9	29
<b>Province</b>							
Province 1	50.9	34.8	34.0	96.6	78.8	9.0	145
Province 2	65.3	23.1	24.5	95.3	74.3	8.5	125
Province 3	45.0	29.9	25.7	99.3	86.7	8.1	263
Province 4	56.7	20.0	20.5	100.0	99.5	1.3	57
Province 5	61.7	35.8	26.7	100.0	67.5	12.3	88
Province 6	41.3	45.4	22.2	100.0	59.6	4.9	24
Province 7	67.8	54.2	49.4	100.0	82.1	27.5	69
National average	54.1	32.3	28.8	98.4	80.7	9.9	772

Note: Excluded stand-alone HTCs, Sukra Raj and Bir hospitals.

<sup>1</sup> This applies to only providers who were observed at the facility.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data



## Integrated maternal neonatal and childhood illness services

Table 22 presents the proportion of clients provided with quality services as per national standards among all IMNCI clients observed. With regard to IMNCI services, 24% of clients nationwide were provided with quality services on all five items: clients observed receiving services by an IMNCI trained provider, caretakers reporting having been told about the child's diagnosis, availability of amoxicillin tablets/capsules or cotrimoxazole as well as zinc and ORS (meaning these were provided to clients), clients reporting having recommended the facility to others, and clients having reported no problems regarding wait time. Province 6 had the highest percentage of pleased clients, with clients at 34%, of facilities reporting having received these services. Provinces 1 and 7 had the lowest proportion, at 20%.

**Table 23 Provision of quality IMNCI services as per national standards**

Among all sick child clients observed, the percentages of clients provided with quality services as per national standard, by facility type and province

Background characteristics	Clients received services by a IMNCI trained provider <sup>1</sup>	Care taker told about child's diagnosis	Availability of amoxicillin tab/cap or cotrimoxazole and zinc and ORS	Client recommended the facility to others	Client reported no problems regarding waiting time	All five items	Number of sick child clients
<b>Facility type</b>							
Zonal and above hospitals	23.7	91.2	70.5	96.3	47.6	7.7	164
District level hospitals	27.3	87.2	100.0	93.7	52.2	13.2	235
Private hospitals	25.4	87.0	73.9	97.7	75.4	10.9	308
PHCCs	49.3	87.7	100.0	97.1	66.1	29.3	146
HPs	49.6	81.3	100.0	95.6	76.7	30.7	1,306
UHCs	13.7	86.5	100.0	98.9	84.9	13.7	26
<b>Province</b>							
Province 1	34.8	88.1	95.2	94.4	63.3	20.4	302
Province 2	46.1	75.4	99.1	93.4	75.2	22.3	530
Province 3	38.8	90.2	81.9	96.7	67.4	23.7	559
Province 4	41.8	90.2	100.0	97.7	77.8	29.5	160
Province 5	40.9	82.5	97.1	97.0	76.1	26.1	289
Province 6	56.2	80.9	99.8	99.3	74.3	33.7	150
Province 7	35.6	82.0	100.0	96.7	67.3	20.3	197
National average	41.4	83.9	94.1	95.9	71.1	24.0	2,186

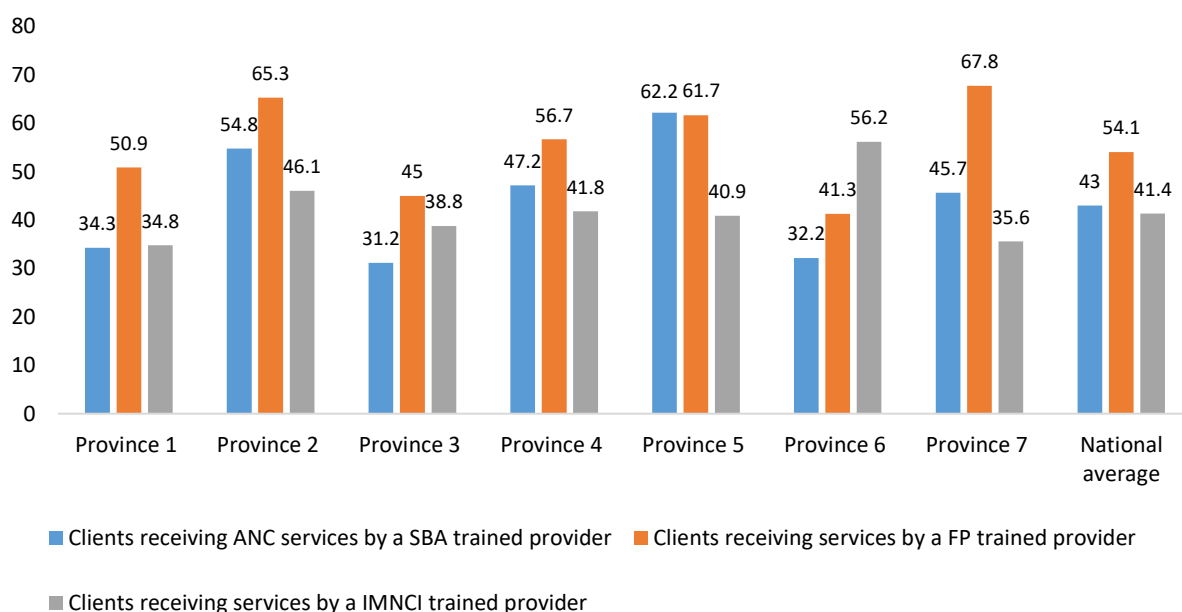
Note: Excluded stand-alone HTC's, Sukra Raj and Bir hospitals.

<sup>1</sup> This applies to only providers who were observed at the facility.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

Figure 4 shows the proportion of ANC, family planning, and IMNCI clients treated by a trained provider. Province 5 had the highest proportion of clients observed receiving ANC services from a trained provider (62%), and Province 3 the lowest (31%). With regard to family planning service provision by a trained provider, Province 7 performed the best, with 68% of facilities observed providing this service. The lowest was Province 6, at 41%. The highest proportion of clients observed to have received IMNCI services by a trained provider was in Province 7 (56%), and the lowest in Province 1 (35%).

**Figure 4 Proportion of antenatal care, family planning, and IMNCI services received from a trained provider (%)**



### 3.6 Free Health Care

#### 3.6.1 Clients receiving free health care

Table 23 presents the proportion of clients not having paid for services received that day among interviewed ANC clients, family planning clients, and caretakers of sick children. Across each of the provinces, we found that more than 80% of ANC clients did not pay for services, with the highest proportion (93%) in Provinces 2 and 6. Similarly, nationwide, 97% of family planning clients did not pay for services, with a high of 99% in Provinces 2 and 4 and a low of 88% in Province 6. Likewise, the proportion of caretakers of sick children who did not pay for services ranged from 70% (Province 3) to 95% (Province 2), with a national average of 86%.

**Table 24 Clients receiving free health care**

Among interviewed antenatal care clients, family planning clients, and caretakers of sick children in district hospitals, primary health care centers and health posts, and urban health centers, percentages reporting that they did not pay any money for the services they received that day at the facility, by facility type and province

Background characteristics	Percentages who did not pay for services received that day	Number of interviewed ANC clients	Percentages who did not pay for services received that day	Number of interviewed family planning clients	Percentages who did not pay for services received that day	Number of interviewed caretakers of sick children
<b>Facility type</b>						
District level hospitals	65.1	254	81.5	62	24.9	235
PHCCs	85.6	172	92.3	81	81.3	146
HPs	97.9	610	99.4	544	97.2	1,306
UHCs	100.0	5	100.0	29	98.9	26
<b>Province</b>						
Province 1	91.4	173	95.5	143	83.7	255
Province 2	92.7	279	98.7	120	95.3	505
Province 3	82.4	194	98.2	226	70.4	295
Province 4	88.0	72	99.2	57	86.4	126
Province 5	83.2	194	98.1	85	92.3	217
Province 6	93.1	48	87.7	23	77.0	143
Province 7	85.1	81	93.9	63	87.6	172
National average	87.9	1,041	97.1	717	85.9	1,713

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 4 CHILD HEALTH SERVICES

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### Key Findings

- *With all three basic services (outpatient curative care for sick children, growth monitoring, child vaccination) combined, nationwide 85% of health facilities offered these services, with a range among provinces from 77% (Province 2) to 91% (Province 4).*
- *Essential medicines such as ORS were not universally available, with availability ranging from 83% (Province 2) to 97% (Province 5).*
- *Key essential antibiotics such as amoxicillin and cotrimoxazole were much less readily available. Among the provinces, only 14% (Province 6) to 39% (Province 3) had access to amoxicillin. The availability of cotrimoxazole (syrup, suspension, or dispersible tablets) ranged between 37% (Province 6) and 59% (Province 5).*

In Chapter 4 we present information on the provision of child health services, including: the availability of outpatient curative care of sick children, child growth monitoring, and child vaccinations; service readiness in terms of guidelines, trained staff and equipment for sick child care, and vaccinations services; medicines and commodities for sick child care; availability and storage of vaccines; client opinions from caretakers of sick children; and supportive management and training of service providers. Enumerators collected this information through the facility inventory questionnaire, the health provider questionnaire, and the observation protocols.

### 4.1 Availability of Child Health Services

#### 4.1.1 Outpatient curative care, child growth monitoring, and child vaccination

Table 24 presents the proportion of facilities offering specific child health services. Nearly all facilities in all seven provinces offered outpatient curative care for sick children. The proportion of facilities offering growth monitoring ranged between 85% (Province 2) and 99% (Province 4) across the seven provinces, with a national average of 93%. In each of the seven provinces more than 80% of facilities offered child vaccination services, with the highest proportion (91%) in Province 4; the national average was 87%. With all three basic services combined, nationwide 85% of health facilities offered these services, with a range among provinces from 77% (Province 2) to 91% (Province 4). Similarly, the proportion of facilities offering routine vitamin A supplementation ranged from 90% (Province 3) to 99% (Province 4), with a national average of 94%.

**Table 25 Availability of child health services**

Among all facilities, the percentages offering specific child health services at the facility, by facility type and province								
Background characteristics	Percentages of facilities that offer:							Number of facilities excluding Sukra Raj and Bir hospitals <sup>4</sup>
	Outpatient curative care for sick children	Growth monitoring	Child vaccination <sup>1</sup>	All three basic child health services	Child vaccination plus <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	84.6	36.9	36.9	69.9	6
District level hospitals	98.7	96.1	89.5	86.8	25.0	25.0	94.7	16
Private hospitals	92.7	54.4	29.1	25.9	10.7	9.5	44.9	70
PHCCs	100.0	96.1	95.2	92.2	25.2	24.2	99.0	42
HPs	100.0	96.7	91.7	90.1	23.6	23.1	98.8	775
UHCs	98.1	76.5	81.8	71.3	26.1	22.8	94.6	32
<b>Province</b>								
Province 1	98.1	92.3	89.5	87.9	22.8	22.7	91.8	164
Province 2	100.0	85.3	83.6	76.8	38.4	36.4	94.3	171
Province 3	99.3	91.1	86.0	84.6	9.3	8.7	90.3	185
Province 4	100.0	99.3	91.4	91.4	23.4	23.4	99.3	119
Province 5	99.4	95.3	88.1	87.3	42.6	41.8	96.8	138
Province 6	99.7	98.1	86.7	86.4	9.3	9.3	96.1	74
Province 7	99.5	94.1	81.5	79.4	1.6	1.0	96.1	89
National average	99.4	92.7	86.8	84.7	22.9	22.2	94.4	940

Note: Stand-alone HTC sites are excluded from this and other tables in this chapter.  
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 child growth monitoring services.  
<sup>1</sup> Facility routinely provides BCG, pentavalent, polio and measles-rubella (MR) vaccinations at the facility.  
<sup>2</sup> Facility routinely provides BCG, pentavalent, polio and measles-rubella (MR) vaccinations, as well as pneumococcal conjugate (PCV), and Japanese encephalitis vaccinations at the facility.  
<sup>3</sup> Includes outpatient curative care for sick children, child growth monitoring and all six child vaccinations.  
<sup>4</sup> This denominator applies only to the indicators "child curative care" and "child vaccination" services.  
<sup>5</sup> This denominator applies only to the indicators "child growth monitoring" services.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 4.2 Service Readiness

### 4.2.1 Guidelines, trained staff, and equipment for sick child care

Table 25 presents the proportion of facilities with staff reporting the availability of written guidelines and observation of trained staff and equipment for sick childcare. The proportion of facilities having IMCI/IMNCI guidelines across the seven provinces ranged from 56% (Province 1) to 73% (Province 5), with the national average at 61%. Similarly, the proportion of facilities having at least one provider trained on IMCI/IMNCI in the 24 months preceding the survey across the seven provinces ranged from 14% (Province 7) to 29% (Province 6), with the national average at 22%. Likewise, the proportion of facilities having at least one provider trained on infant and young child feeding ranged from 5% (Province 4) to 30% (Province 7). The national average was 15%.

With regard to equipment for sick child care, we found that more than 90% facilities across all seven provinces had stethoscopes, with universal availability in the majority of the provinces. Similarly, thermometers were observed to be available in more than 80% of facilities across all provinces, with the lower proportion (86%) in Province 2. The proportion of facilities with a child weighing scale across the seven provinces ranged from 33% (Province 2) to 62% (Province 7), with the national average at 46%. An infant weighing scale was available in a relatively higher proportion of facilities across the provinces, ranging between 52% (Province 2) and 75% (Province 4), with the national average at 64%. Availability of length or height board (24%), tape for circumference (29%), and tape for MUAC (23%) was relatively low overall nationally, and the proportion was similar across the seven provinces, except for availability of tape for MUAC.

**Table 26 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 facility type and province

Background characteristics	Trained staff			Equipment									Number of facilities offering out-patient curative care for sick children	
	IMCI/IMNCI guidelines	IMCI/IMNCI <sup>1</sup>	Infant and young child feeding training <sup>2</sup>	Child weighing scale <sup>3</sup>	Infant weighing scale <sup>4</sup>	Length or height board	Tape for head circumference	Tape for MUAC	Thermometer	Stethoscope	Child health card (HMIS 2.1)	Timer		All items
<b>Facility type</b>														
Zonal and above hospitals	17.7	14.1	0.0	38.9	63.7	85.9	60.4	24.8	96.5	100.0	60.1	81.6	0.0	6
District level hospitals	56.0	42.7	28.0	56.0	78.7	52.0	50.7	30.7	100.0	100.0	73.3	97.3	0.0	15
Private hospitals	5.7	3.6	2.0	31.4	57.2	46.2	48.3	11.1	99.7	100.0	17.9	90.6	0.0	65
PHCCs	73.3	37.3	29.1	49.0	65.9	53.9	37.8	36.4	97.6	99.5	81.9	97.1	1.0	42
HPs	66.8	22.6	14.9	47.0	64.8	20.4	26.2	23.7	94.2	98.1	81.2	94.3	0.0	775
UHCs	24.6	13.7	13.5	27.8	39.0	8.5	36.5	23.2	97.4	100.0	65.5	94.9	0.0	31
<b>Province</b>														
Province 1	56.0	15.1	12.1	40.4	63.5	20.8	24.7	12.6	97.9	97.5	82.5	94.4	0.0	161
Province 2	60.3	17.2	9.8	32.8	52.1	19.8	24.5	18.7	86.0	94.3	64.6	89.6	0.0	171
Province 3	56.0	27.9	14.5	38.5	62.7	30.9	36.3	49.2	100.0	100.0	72.1	98.6	0.1	184
Province 4	61.5	26.6	4.9	54.4	75.4	16.2	32.7	10.3	95.6	100.0	86.1	95.4	0.0	119
Province 5	72.9	24.4	17.5	53.7	69.8	31.7	31.6	15.7	98.2	100.0	80.5	95.6	0.2	137
Province 6	65.6	29.5	24.7	53.5	58.7	19.1	24.7	25.6	96.7	98.3	64.3	94.8	0.0	74
Province 7	59.0	14.4	30.0	62.1	67.1	29.0	26.9	27.5	89.2	100.0	84.4	89.1	0.0	89
National average	61.0	21.9	14.7	45.5	63.7	24.2	29.2	23.5	95.0	98.4	76.1	94.2	0.0	934

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

Note: MUAC = Mid-Upper Arm Circumference.

<sup>1</sup> At least one interviewed provider of child health services at the facility reported receiving in-service training in Integrated Management of Childhood Illness (IMCI) or 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 the Infant and Young Child Feeding (IYCF) training 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 weighing scale with gradation of 250 grams, or a digital standing weighing scale with gradation of 250 grams or less where an adult can hold a child to be weighed.

<sup>4</sup> A weighing scale with gradation of 100 grams, or a digital standing weighing scale with gradation of 100 grams where an adult can hold an infant to be weighed.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

#### 4.2.2 Medicines and commodities for sick child care

A range of medicines and commodities are required in health facilities to provide care for sick children. The NHFS 2015 assessed availability of essential medicines [ORS, zinc tablets, amoxicillin (syrup, suspension or dispersible tablets), cotrimoxazole (syrup, suspension or dispersible tablets), paracetamol syrup, vitamin A capsules, and albendazole) and priority medicines (ampicillin powder for injection, ceftriaxone powder for injection, and gentamycin injection) required for child health services.

Table 26 presents the proportion of facilities where indicated essential and priority medicines to support care for the sick child were observed to be available in the facility on the day of the survey, among facilities offering outpatient care services for sick children. Figure 5 depicts the availability of essential medicines for sick child care. The proportion of facilities across the seven provinces where ORS was observed to be available ranged from 83% (Province 2) to 97% (Province 5). Similarly, zinc tablets and albendazole were available in more than 90% of the facilities across all seven provinces. Likewise, paracetamol syrup or suspension was available in more than 80% of facilities across all seven provinces. On the other hand, we found that amoxicillin (syrup, suspension or dispersible tablets) was much less readily available. Among the provinces, only 14% (Province 6) to 39% (Province 3) had access to amoxicillin. The national average was 24%. The observed availability of cotrimoxazole (syrup,

suspension or dispersible tablets) ranged from 37% (Province 6) to 59% (Province 5), with the national average at 49%.

**Table 27 Availability of essential and priority medicines and commodities**

Among facilities offering outpatient curative care services for sick children, the percentages where indicated essential and priority medicines to support care for the sick child were observed to be available in the facility on the day of the survey, by facility type and province

Background characteristics	ORS <sup>1</sup>	Essential medicines							Priority medicines			Number of facilities offering outpatient curative care for sick children	
		Zinc tablets	Amoxicillin syrup, suspension, or dispersible tablets <sup>1</sup>	Cotrimoxazole suspension or syrup, dispersible	Paracetamol syrup or suspension <sup>1</sup>	Vitamin A capsules <sup>1</sup>	Albendazole	Ampicillin powder for injection	Ceftriaxone powder for injection	Gentamycin injection			
<b>Facility type</b>													
Zonal and above hospitals	82.3	64.6	42.7	39.2	78.8	49.8	89.4	61.1	78.8	78.1	6		
District level hospitals	94.7	93.3	45.3	62.7	94.7	89.3	96.0	32.0	57.3	86.7	15		
Private hospitals	78.4	61.3	58.5	24.9	73.0	41.2	72.5	35.8	67.5	64.0	65		
PHCCs	91.8	99.0	22.8	52.8	88.8	93.7	99.0	10.2	13.6	83.0	42		
HPS	93.8	99.1	20.6	51.2	85.9	94.1	98.6	2.9	1.9	63.2	775		
UHCs	88.2	83.1	29.0	37.0	89.3	80.9	100.0	0.0	0.0	32.6	31		
<b>Province</b>													
Province 1	95.9	94.7	17.9	47.3	90.3	90.9	97.3	6.8	7.1	66.1	161		
Province 2	83.3	96.7	16.5	40.3	79.8	87.1	95.6	3.0	4.1	55.2	171		
Province 3	94.3	90.2	38.9	54.6	82.8	87.5	95.4	9.0	15.2	46.4	184		
Province 4	96.2	99.5	31.6	45.8	94.6	96.2	99.8	4.4	12.1	69.4	119		
Province 5	96.6	96.4	20.8	58.5	86.1	93.9	96.4	4.5	7.0	61.1	137		
Province 6	92.0	96.5	14.4	37.2	84.1	81.4	94.6	8.7	3.4	86.6	74		
Province 7	88.2	99.5	23.1	57.8	80.0	88.2	98.7	8.8	5.1	87.6	89		
National average	92.4	95.6	24.1	49.1	85.3	89.7	96.7	6.2	8.3	63.6	934		

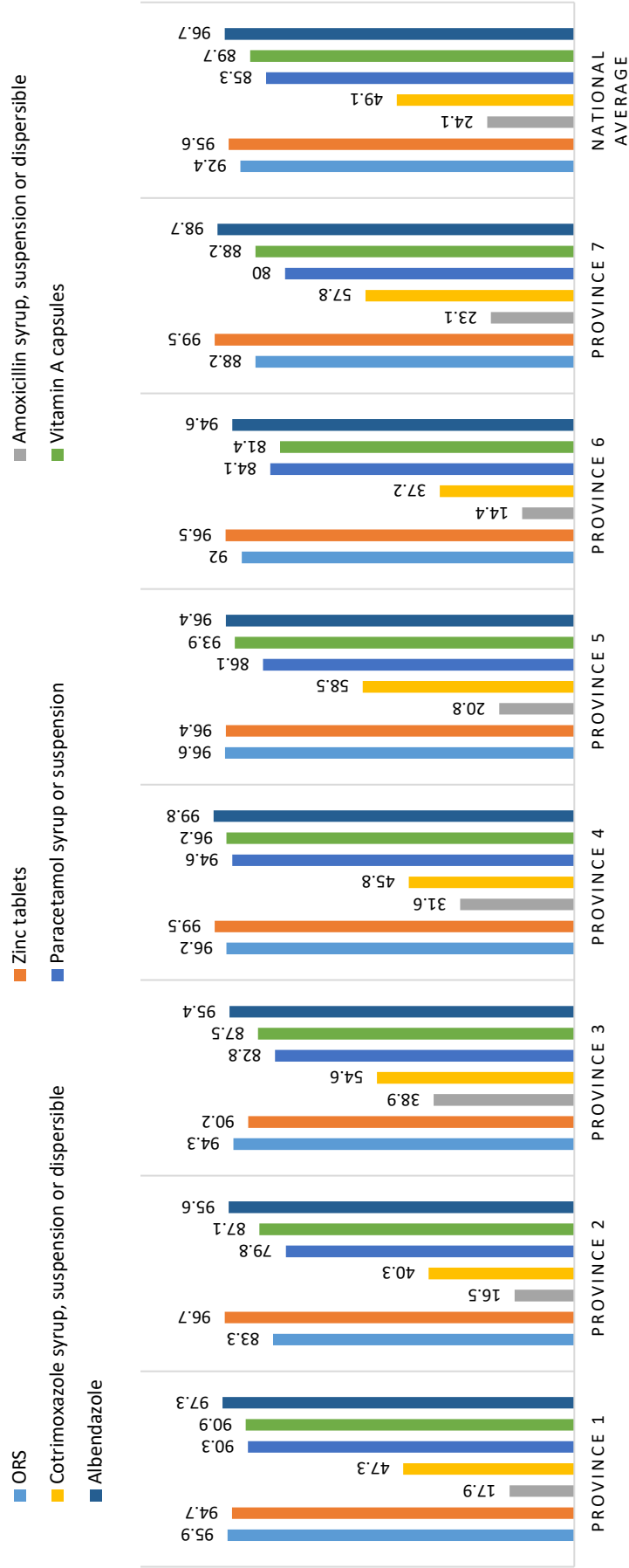
Note: The essential medicines comprise the medicines and commodities indicators for assessing readiness to provide preventative and curative child health services within the health facility assessment methodology proposed by WHO and USAID (WHO 2012).

Note: ORS = oral rehydration salts.

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

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Figure 5 Essential medicines for child health services (%)**





With regard to the observed availability of priority medicines, the availability of gentamycin injection ranged from 46% (Province 3) to 88% (Province 7), with a national average of 64%. The availability of other two priority medicines: ampicillin powder for injection and cotrimoxazole powder for injection was relatively low.

### 4.2.3 Guidelines, trained staff and equipment for vaccination services

Table 27 presents the proportion of facilities having indicated guidelines, trained staff, and equipment necessary for vaccination services among all facilities offering child vaccination services. The proportion of facilities having guidelines for child vaccination services (national immunization manual or other guidelines for child vaccination) ranged from 40% (Province 4) and to % (Province 5) across the seven provinces, with a national average of 55%. Similarly, the proportion of facilities having at least one provider trained on the Expanded Program on Immunization (EPI) in the 24 months preceding the survey across the seven provinces ranged between 13% (Province 6) and 26% (Province 2), with a national average of 21%, according to health worker interviews. With regard to equipment for vaccination services, more than 80% of facilities across all seven provinces had safety boxes, syringes, and needles, with some provinces having these items in more than 90% of facilities. Similarly, the availability of a vaccine carrier with ice packs at facilities ranged from 61% (Province 2) to 81% (Provinces 3 and 6), with a national average of 75%. However, most facilities did not have access to a needle destroyer—only 3% nationwide, from less than 1% in Province 2 to 7% of facilities in Province 4.

**Table 28 Guidelines, trained staff, and equipment for vaccination services**

Among facilities offering child vaccination services, the percentages having EPI guidelines, trained staff, and basic equipment necessary for vaccination services, by facility type and province

Background characteristics	Guidelines <sup>1</sup>	Trained staff <sup>2</sup>	Equipment				All items <sup>5</sup>	Number of facilities offering child vaccination services
			Vaccine carrier with ice pack <sup>3</sup>	Safety box	Syringes and needles <sup>4</sup>	Needle destroyer		
<b>Facility type</b>								
Zonal and above hospitals	50.2	20.8	87.5	83.1	91.7	24.9	4.2	5
District level hospitals	54.4	19.1	91.2	83.8	85.3	10.3	10.3	14
Private hospitals	35.9	14.0	84.5	72.6	85.9	20.4	4.2	20
PHCCs	47.9	28.5	94.4	84.7	80.6	8.2	9.2	40
HPs	56.6	20.3	73.6	88.7	88.1	2.0	7.2	710
UHCs	30.1	24.9	55.6	92.5	98.8	0.0	5.6	26
<b>Province</b>								
Province 1	51.4	22.5	73.5	85.2	80.4	1.0	8.4	146
Province 2	45.0	25.7	60.8	80.3	86.6	0.1	6.9	143
Province 3	61.2	22.1	81.4	94.9	92.8	3.3	10.5	159
Province 4	39.8	19.7	75.0	94.0	95.2	7.4	1.8	109
Province 5	72.0	15.7	77.9	93.3	89.8	3.4	7.5	121
Province 6	59.5	12.9	80.7	80.0	89.2	3.2	4.7	64
Province 7	55.6	20.6	78.6	83.8	80.4	4.4	7.8	73
National average	54.7	20.7	74.7	88.1	88.0	3.0	7.2	816

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

<sup>1</sup> National immunization manual for child vaccinations or other guidelines for vaccinations, such as Khopko Byawaharik Gyan 2070 or Measles Rubella Khop sambandhi Nirdeshika available at the service site.

<sup>2</sup> At least one interviewed provider of child vaccination services in the facility reported receiving in-service training in EPI 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> If facility reports that it purchases ice for use with the vaccine carriers, this was accepted in place of ice packs.

<sup>4</sup> Single-use standard disposable syringes with needles or auto-disable syringes with needles.

<sup>5</sup> All items include: guidelines, trained staff, vaccine carrier with ice pack, safety box or needle destroyer and syringes and needles.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 4.2.4 Availability and storage of vaccines

### Frequency of availability of vaccines

Table 28 depicts the proportion of facilities providing child vaccination services at specific frequencies among the facilities offering routine vaccination services. According to the National Immunization Program Comprehensive Multi-Year Plan 2011-2016, health facilities are expected to run at least three to five immunization clinics per month. The majority of the facilities (>70%) provided routine Bacillus Calmette-Guérin (BCG) vaccinations, routine pentavalent vaccinations, routine polio vaccinations, and routine Measles Rubella (MR) vaccinations 1-2 days per month. The proportion of facilities meeting the national requirement (providing immunization services 3-5 days a month) for BCG vaccination ranged from 11% (Province 7) to 22% (Province 5), with 15% of facilities nationwide meeting this requirement. The picture on meeting national requirements of other vaccinations: pentavalent, polio and MR was similar.

**Table 29 Frequency of availability of child health services—vaccination services**

Among facilities offering routine child vaccination services, the percentages providing the service at the facility at specific frequencies, by facility type and province

Background characteristics	Routine BCG vaccination				Routine pentavalent vaccination				Routine polio vaccination				Routine measles rubella (MR) vaccination			
	1-2 days	3-5 days	>5 days	Number of facilities	1-2 days	3-5 days	>5 days	Number of facilities	1-2 days	3-5 days	>5 days	Number of facilities	1-2 days	3-5 days	>5 days	Number of facilities
<b>Facility type</b>																
Zonal and above hospitals	8.3	24.9	66.8	5	8.3	29.1	62.6	5	8.3	29.1	62.6	5	8.3	29.1	62.6	5
District level hospitals	37.5	40.3	22.2	15	38.0	40.8	21.1	15	37.5	41.7	20.8	15	37.7	40.6	21.7	14
Private hospitals	40.1	33.9	26.1	20	28.9	37.4	33.7	20	33.7	37.8	28.6	20	34.0	44.4	21.6	21
PHCCs	69.5	29.0	1.5	41	69.6	27.9	2.5	41	68.9	28.6	2.5	41	70.2	28.2	1.5	41
HPs	85.3	13.2	1.5	722	85.3	13.2	1.5	719	85.6	13.0	1.5	719	85.4	13.1	1.5	715
UHCs	91.2	8.8	0.0	26	91.2	8.8	0.0	26	91.2	8.8	0.0	26	91.1	8.9	0.0	26
<b>Province</b>																
Province 1	83.1	13.2	3.7	147	84.1	13.4	2.5	147	84.0	13.5	2.5	147	84.0	13.5	2.5	147
Province 2	84.7	14.7	0.6	143	84.7	14.0	1.2	143	84.7	14.0	1.2	143	84.9	14.6	0.6	143
Province 3	83.3	14.5	2.1	161	80.9	15.5	3.6	161	81.6	15.5	2.9	161	81.3	16.0	2.7	160
Province 4	84.4	14.7	0.9	111	84.4	14.5	1.1	111	84.4	14.7	0.9	111	84.3	14.9	0.8	109
Province 5	72.1	21.5	6.4	127	73.7	19.6	6.7	124	73.4	19.9	6.7	125	72.3	21.1	6.6	127
Province 6	82.6	12.3	5.0	64	82.6	13.0	4.4	64	82.6	12.6	4.7	64	82.6	12.6	4.7	64
Province 7	87.3	11.2	1.5	77	84.7	13.8	1.5	77	87.3	11.2	1.5	77	89.3	9.1	1.5	73
National average	82.3	14.9	2.8	829	82.0	15.0	3.0	826	82.3	14.8	2.9	827	82.2	15.1	2.7	822

Note: BCG = Bacillus Calmette-Guérin

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

### Vaccine storage

Table 29 presents the proportion of facilities offering child vaccination services that reported storing those vaccines. The proportion of facilities reporting that they routinely store vaccines ranged from 3% (Province 2) to 20% (Province 3), with a national average of 10%. Most of the facilities receive all vaccines from higher-level facilities and store them for a brief period.

**Table 30 Vaccine storage**

Among facilities offering child vaccination services, the percentages reporting that they store vaccines, and percentages reporting that they do not store any vaccines, by facility type and province

Background characteristics	Routinely store vaccines	Receive all vaccines from higher center and store for short time	Do not store any vaccines	Number of facilities offering child vaccination services
<b>Facility type</b>				
Zonal and above hospitals	58.5	37.4	4.2	5
District level hospitals	67.6	27.9	4.4	14
Private hospitals	47.3	38.4	14.3	20
PHCCs	41.8	53.6	4.6	40
HPs	5.6	74.5	19.9	710
UHCs	4.9	64.7	30.5	26
<b>Province</b>				
Province 1	9.6	71.1	19.3	146
Province 2	2.8	80.0	17.2	143
Province 3	20.3	64.2	15.5	159
Province 4	6.1	70.2	23.7	109
Province 5	8.1	71.2	20.7	121
Province 6	4.8	63.9	31.3	64
Province 7	13.8	77.6	8.6	73
National average	9.8	71.2	19.0	816

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 4.3 Client Opinions

### 4.3.1 Feedback from caretakers of observed sick children on service problems

Table 30 presents the proportion of interviewed caretakers who considered specific service issues to be major problems for them on the day of the enumerator's visit. Overall, caretakers tended to have fairly positive views of the services offered by their facilities, with low percentages of caretakers mentioning many specific problems. Nonetheless, nationwide, around 8% of the caretakers considered waiting time as a major problem, this highest in Province 1 (13%) and lowest in Province 4 (2%). Similarly, availability of medicines was another major problem reported by a substantial proportion of caretakers, at between 13% of caretakers in Province 6 and 4% in Province 3.

**Table 31 Feedback from caretakers of observed sick children on service problems**

Among interviewed caretakers of sick children, the percentages who considered specific service issues to be major problems for them on the day of the visit, by managing authority and province

Client service issue	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
Behavior/attitude of provider	1.8	0.0	1.8	2.3	0.9	2.7	1.3	0.5	0.9	1.5
Amount of explanation about child's illness	3.2	1.3	4.4	5.2	1.0	0.0	2.3	0.6	5.3	3.0
Wait to see provider	8.3	9.0	12.7	6.2	10.9	2.1	7.8	8.6	6.1	8.4
Ability to discuss problems	3.3	0.7	3.6	4.6	1.7	0.0	2.1	1.0	5.3	2.9
Availability of medicines at facility	8.7	0.7	10.3	8.8	3.5	6.0	7.0	13.1	9.1	7.5
Number of days facility is open	3.5	0.1	7.8	0.2	1.1	1.9	3.0	5.7	7.1	3.0
Number of hours facility is open	5.3	0.3	11.8	1.4	1.4	2.1	5.9	9.2	7.8	4.6
Cleanliness of facility	3.0	1.2	4.9	5.2	0.8	0.0	2.5	0.8	2.9	2.8
Cost of services	1.3	2.8	1.2	0.3	2.8	0.5	1.4	1.9	2.3	1.5
Amount of visual privacy	1.3	0.9	0.5	0.1	2.3	0.0	1.2	3.5	2.3	1.3
Amount of auditory privacy	1.3	0.9	0.8	0.1	2.3	0.0	1.0	3.3	2.0	1.2
Number of interviewed caretakers of sick children	1,878	308	302	530	559	160	289	150	197	2,186

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 4.4 Supportive Management and Training of Service Providers

### 4.4.1 General training and supervision

Table 31 presents the proportion of child health service providers who reported receiving training related to their work and personal supervision during the time periods specified in the table. The proportion of providers who reported receiving training related to child health during the 24 months preceding the survey ranged from 25% (Province 2) to 41% (Province 6), while the national average was 30%. Similarly, the proportion of service providers who reported receiving personal supervision during the six months preceding the survey ranged from 65% (Province 1) to 77% (Province 5), with a national average of 72%.

**Table 32 Supportive management for providers of child health services**

Among interviewed child health service providers, the percentages who report receiving training related to their work and personal supervision during the specified time periods, by facility type and province

Background characteristics	Percentages of interviewed providers who received:			Number of interviewed providers
	Training related to child health during the 24 months preceding the survey <sup>1</sup>	Personal supervision during the 6 months preceding the survey <sup>2</sup>	Training related to child health during the 24 months and personal supervision during the 6 months preceding the survey	
<b>Facility type</b>				
Zonal and above hospitals	10.3	62.2	8.5	55
District level hospitals	28.7	67.6	20.6	156
Private hospitals	7.5	58.7	4.1	395
PHCCs	33.6	75.7	27.5	257
HPs	34.0	73.6	26.3	2,369
UHCs	27.5	74.6	25.3	65
<b>Province</b>				
Province 1	27.4	65.3	17.4	540
Province 2	24.6	76.2	19.9	594
Province 3	30.7	68.3	23.4	709
Province 4	31.8	72.2	25.3	406
Province 5	30.0	76.7	27.1	503
Province 6	41.4	65.8	26.3	204
Province 7	33.5	75.1	27.4	341
National average	30.0	71.5	23.2	3,296

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

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

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

### 4.4.2 In-service training

Table 32 presents the proportion of child health service providers who reported receiving in-service training on topics related to child health during the specified period before the survey. The proportion of providers who reported receiving in-service training on the National Immunization Program (NIP) or cold chain during the past 24 months ranged from 7% (Province 7) to 14% (Province 1 and 4), with a national average of 11%. A similar proportion of providers received in-service training on IMCI/IMNCI, with a national average of 11%. The proportion of providers who reported receiving training on performing malaria rapid diagnostic test (RDT), infant and young child feeding, iron deficiency disorder (IMN), and essential nutrition action during the last 24 months was relatively low nationwide.

**Table 33 Training for child health service providers**

Among interviewed child health service providers, the percentages who report receiving in-service training on topics related to child health during the specified period before the survey, by facility type and province

Background characteristics	Percentages of providers of child health services who reported that they received in-service training on:												Number of interviewed providers
	NIP or cold chain monitoring		IMCI/ IMNCI		Performing malaria RDT		Infant and young child feeding training		IMN training		Essential nutrition action training		
	During the past 24 months	At anytime	During the past 24 months	At anytime	During the past 24 months	At anytime	During the past 24 months	At anytime	During the past 24 months	At anytime	During the past 24 months	At anytime	
<b>Facility type</b>													
Zonal and above hospitals	6.3	19.2	3.7	21.4	0.0	11.6	0.0	6.3	0.0	5.1	2.5	8.0	55
District level hospitals	8.7	22.4	15.4	35.4	6.9	13.6	8.5	16.0	3.7	8.5	6.1	13.1	156
Private hospitals	2.1	8.1	1.6	9.0	0.3	4.4	0.7	3.5	0.5	2.4	0.8	3.5	395
PHCCs	12.2	28.2	14.8	43.1	5.9	16.8	9.3	19.3	3.1	9.2	7.4	14.9	257
HPs	12.7	35.1	12.3	44.1	6.8	18.8	7.0	17.1	2.6	11.9	5.8	17.3	2,369
UHCs	13.7	22.1	8.9	19.9	11.8	16.1	11.6	12.0	1.8	3.7	5.4	7.5	65
<b>Province</b>													
Province 1	13.9	31.9	8.3	35.0	7.7	17.4	5.1	14.9	1.4	12.3	3.5	14.3	540
Province 2	10.1	32.4	7.1	38.8	5.8	17.6	4.0	10.4	1.1	6.8	3.8	14.9	594
Province 3	11.9	29.4	12.9	38.2	6.5	17.0	5.6	12.9	1.9	6.6	3.9	10.5	709
Province 4	14.1	32.0	15.0	34.9	4.5	16.6	2.1	9.3	1.8	11.1	2.3	9.8	406
Province 5	9.7	31.4	13.2	43.9	6.9	18.8	8.1	21.3	4.3	13.7	6.8	17.8	503
Province 6	8.3	25.0	20.2	51.8	4.6	15.2	13.4	26.9	7.5	15.1	6.5	20.3	204
Province 7	7.1	24.3	5.8	32.9	3.2	9.6	13.7	20.5	2.2	10.0	14.1	23.8	341
National average	11.1	30.2	11.1	38.5	5.9	16.5	6.5	15.3	2.4	10.1	5.3	14.9	3,296

Note:

NIP = National Immunization Program (of Nepal).

IMCI = Integrated Management of Childhood Illness.

IMNCI = Integrated Management of Neonatal and Childhood Illness.

IYCF = Infant and young child feeding.

IMN = Iron deficiency disorder related.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data



## 5 FAMILY PLANNING SERVICES

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### Key Findings

- *More than 96% of the facilities in each of the seven provinces offered at least one modern method of temporary family planning, while the proportion of facilities offering male or female sterilization ranged from 23% (Province 4) to 53% (Province 6).*
- *In more than 89% of facilities, every method provided by the facility was available on the day of the survey in each of the seven provinces, with the highest proportion at 100% in Province 4.*

Chapter 5 gives results on family planning services, showing the key findings on availability of family planning services; service readiness in terms of availability of service guidelines, trained staff and equipment; client opinion on major problems faced by clients, and knowledge on contraceptive methods; and supportive management and training of family planning service providers.

### 5.1 Availability of Family Planning Services

#### 5.1.1 Contraceptive method mix and method availability

Table 33 presents the proportion of facilities offering different contraceptive methods. According to the health workers, more than 96% of the facilities in each of the seven provinces offered at least one modern method of temporary family planning. In each of the seven provinces, around two-thirds of the facilities in each of the seven provinces offered counselling on the periodic abstinence/rhythm method, with a national average of 62%. The proportion of facilities offering male sterilization ranged from 22% (Province 4) to 53% (Province 6), with the national average of 35%. In each of the seven provinces, a similar proportion of facilities offered female sterilization in each of the seven provinces.

**Table 34 Availability of family planning services**

Among all facilities, the percentages offering temporary methods of family planning, male sterilization, female sterilization, and the percentages offering any modern family planning, by facility type and province

Background characteristics	Temporary methods of family planning (FP)			Sterilization				Number of facilities
	Percentages offering any temporary modern method of FP <sup>1</sup>	Percentages offering counselling on periodic abstinence/rhythm	Percentages offering any temporary modern method of FP or counselling on periodic abstinence/rhythm	Percentages offering male sterilization <sup>2</sup>	Percentages offering female sterilization <sup>3</sup>	Percentages offering male or female sterilization	Percentages offering any modern methods of FP <sup>4</sup>	
<b>Facility type</b>								
Zonal and above hospitals	88.3	73.6	88.3	69.9	73.6	77.3	88.3	6
District level hospitals	100.0	75.0	100.0	72.4	68.4	73.7	100.0	16
Private hospitals	70.1	50.7	70.4	40.0	40.7	41.9	70.1	70
PHCCs	100.0	71.3	100.0	37.8	37.8	38.8	100.0	42
HPs	100.0	62.0	100.0	33.9	32.9	34.3	100.0	775
UHCs	100.0	71.3	100.0	34.9	38.8	38.8	100.0	32
<b>Province</b>								
Province 1	96.2	60.2	96.2	51.9	51.8	51.9	96.2	164
Province 2	98.1	57.3	98.1	32.2	28.3	32.5	98.1	171
Province 3	95.6	65.2	95.6	29.9	30.6	30.7	95.6	185
Province 4	100.0	63.2	100.0	22.4	23.2	23.4	100.0	119
Province 5	97.6	64.6	97.8	31.2	30.1	31.9	97.6	138
Province 6	100.0	60.0	100.0	52.6	50.2	52.6	100.0	74
Province 7	99.3	65.5	99.3	32.6	34.2	35.1	99.3	89
National average	97.7	62.2	97.7	35.4	34.7	36.1	97.7	940

Note: This table, and other tables in this chapter exclude stand-alone HTC sites, Sukra Raj and Kanti hospitals.

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

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

<sup>3</sup> Providers in the facility perform female sterilization or counsel clients on female sterilization.

<sup>4</sup> Facility provides, prescribes, or counsels clients on any of the following: combined oral contraceptive pills, progestin-only injectable (Depo), implant, intrauterine contraceptive device (IUCD), the male condoms, female sterilization, or male sterilization.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 5.1.2 Specific methods offered

### Family planning services offered

Table 34 presents the proportion of facilities that provide, prescribe, or counsel clients on specific family planning methods among the facilities offering any modern method of family planning. Nationally, according to health workers, more than 90% of facilities provided, prescribed, or counselled on combined contraceptive pills, progestin-only injectable (depo) contraceptives, and/or male condoms; and around half of the facilities provided, prescribed, or counselled clients on intrauterine contraceptive devices (IUCDs) and implants. Among the provinces, the proportion of facilities offering IUCDs ranged from 34% (Province 4) to 65% (Province 1). For implants the range was from 25% (Province 4) to 71% (Province 1). The proportion of facilities providing all five temporary contraceptive methods ranged from 24% (Province 4) to 60% (Province 1), with a national average of 44%.



**Table 35 Family planning services offered**

Among facilities offering any modern method of family planning, the percentages that provide, prescribe, or counsel clients on specific family planning methods, by managing authority and province

Methods provided, prescribed, or counselled	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
Combined oral contraceptive pills	99.3	94.9	96.3	100.0	98.7	100.0	100.0	99.7	99.5	99.0
Progestin-only injectable (Depo)	98.4	94.5	99.5	99.9	96.6	97.5	99.4	94.9	98.3	98.2
Male condom	99.9	92.4	98.2	100.0	99.2	100.0	100.0	100.0	100.0	99.5
Intrauterine contraceptive device	48.4	76.8	65.4	45.0	51.2	34.1	49.8	61.6	40.6	49.9
Implant	47.7	65.1	71.5	40.7	47.0	25.1	49.9	61.1	45.8	48.6
Male sterilization	35.1	57.5	54.0	32.9	31.3	22.5	32.0	52.6	32.8	36.3
Female sterilization	34.3	58.9	53.9	28.8	32.0	23.6	30.8	50.2	34.4	35.6
Three temporary modern methods <sup>1</sup>	97.7	87.1	94.3	99.9	95.8	97.5	99.4	94.6	98.1	97.2
Five temporary modern methods <sup>2</sup>	42.6	62.3	60.4	39.4	45.5	23.9	46.9	50.8	34.1	43.6
Seven modern methods <sup>3</sup>	26.6	50.8	45.1	24.7	28.0	14.4	24.5	36.3	19.7	27.9
Emergency contraceptive pills	27.9	80.3	46.5	20.3	32.8	18.1	30.5	36.4	30.6	30.7
Periodic abstinence/rhythm	63.1	71.9	62.6	58.4	68.1	63.2	66.0	60.0	66.0	63.6
Number of facilities offering any modern method of family planning	870	49	157	167	177	119	135	74	89	919

<sup>1</sup> Facility provides, prescribes or counsels clients on all the following three temporary modern family planning methods: combined oral contraceptive pills, progestin-only injectable (Depo), and the male condom.

<sup>2</sup> Facility provides, prescribes or counsels clients on all the following five temporary modern family planning methods: combined oral contraceptive pills, progestin-only injectable (Depo), the male condom, implant and intrauterine contraceptive device (IUCD).

<sup>3</sup> Facility provides, prescribes or counsels clients on all the following 7 modern methods: combined oral contraceptive pills, progestin-only injectable (Depo), the male condom, implant, intrauterine contraceptive device, male sterilization, and female sterilization.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## Methods of family planning provided

As Table 35 shows, in each of the seven provinces more than 88% of facilities in each of the seven provinces provided three temporary modern methods of family planning (combined oral contraceptive pills, depo, and male condom), with the highest proportion at 98% in Province 2. When IUCDs and implants are added, the percentage of facilities offering all five modern methods decreases to 14% nationwide, with a range from 8% (Province 6) to 20% (Province 5).

**Table 36 Methods of family planning provided**

Among facilities offering any modern method of family planning, the percentages that provide clients with specific modern family planning methods<sup>1</sup>, by managing authority and province

Methods provided	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
Combined oral contraceptive pills	97.3	55.3	90.3	98.0	93.2	97.4	94.3	96.4	98.6	95.1
Progestin-only injectable (Depo)	96.7	63.9	96.7	98.0	91.8	95.6	94.6	88.9	97.4	95.0
Male condom	98.6	58.8	98.0	98.1	93.8	97.9	94.2	97.2	96.8	96.5
Intrauterine contraceptive device	20.1	34.8	18.9	16.7	21.1	25.1	23.4	19.7	23.2	20.9
Implant	19.8	20.5	23.8	12.9	20.6	12.4	23.4	19.9	29.0	19.8
Male sterilization	1.3	21.0	1.8	1.8	3.3	2.8	1.7	3.1	2.6	2.4
Female sterilization	1.2	26.3	1.6	1.8	4.7	3.1	2.0	1.7	2.1	2.5
Three temporary modern methods <sup>2</sup>	95.3	53.5	90.2	97.9	90.6	95.0	93.7	88.0	94.9	93.1
Five temporary modern methods <sup>3</sup>	13.9	16.3	13.8	11.1	14.8	12.4	20.2	8.0	16.2	14.0
Seven modern methods <sup>4</sup>	1.0	8.1	1.3	1.1	2.0	1.0	1.1	1.4	1.4	1.4
Emergency contraceptive pills	8.4	36.4	13.6	4.0	14.5	7.6	8.1	10.2	10.7	9.9
Number of facilities offering any modern method of family planning	870	49	157	167	177	119	135	74	89	919

<sup>1</sup> The facility reports that it stocks the method at the facility and makes it available to clients without clients having to go elsewhere to obtain it. In the case of vasectomy and tubal ligation, facility reports that providers in the facility perform the procedures.

<sup>2</sup> Combined oral contraceptive pills, progestin-only injectable (Depo), and the male condom.

<sup>3</sup> Combined oral contraceptive pills, progestin-only injectable (Depo), the male condom, implant and intrauterine contraceptive device (IUCD).

<sup>4</sup> Combined oral contraceptive pills, progestin-only injectable (Depo), the male condom, implant, intrauterine contraceptive device, male sterilization, and female sterilization.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

### 5.1.3 Availability of family planning methods on the day of the assessment

Table 36 presents the proportion of facilities where contraceptive commodities were observed to be available on the day of the survey, among the facilities that provide the indicated modern method of family planning. In more than 89% of facilities every method provided by the facility was available on the day of the survey, in each of the seven provinces, with the highest proportion at 100% in Province 4.

**Table 37 Availability of family planning commodities**

Among facilities that provide<sup>1</sup> the indicated modern method of family planning, the percentages where the commodity was observed to be available on the day of the survey, by managing authority and province

Method	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
Combined oral contraceptive pills	99.5	98.5	99.9	99.3	99.9	100.0	98.9	98.3	99.8	99.5
Progestin-only injectable (Depo)	99.0	98.7	100.0	98.0	99.9	99.8	99.7	96.2	97.6	99.0
Male condom	99.5	99.3	99.9	99.3	99.9	100.0	100.0	96.7	99.0	99.5
IUCD	89.1	98.8	85.5	63.8	98.9	98.6	94.9	95.8	91.5	90.0
Implant	90.6	88.2	91.1	83.2	89.5	98.6	96.7	81.0	90.0	90.5
Every method provided by facility was available on day of survey	94.9	93.5	95.6	89.7	97.5	99.5	96.8	89.1	93.8	94.8
Emergency contraceptive pills	87.0	91.4	84.0	96.9	93.2	97.7	88.6	69.9	79.9	87.9

Note: The denominator for each method is different and the denominators are not shown in the table; the denominators are shown in a working table for reference purposes.

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

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

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 5.2 Service Readiness

### 5.2.1 Service guidelines, trained staff and equipment

As Table 37 shows, among facilities offering any modern contraceptive method, the proportion with national family planning guidelines (Nepal Medical Standard Contraceptive Services Volume I), with at least one staff member trained on family planning service delivery, and with the indicated equipment observed to be available on the day of the survey varies widely among provinces. In Province 5 nearly one-third (31%) of facilities offering any modern method had family planning guidelines compared with only 1% of facilities in Province 1. Nearly half (48%) of the facilities in Province 7 had at least one staff member trained on family planning service delivery compared with the national average of 31%.

With regard to availability of basic equipment, the great majority of facilities had blood pressure apparatus, highest at 95% in Province 5 and lowest at 79% in Province 2, with a national average of 87%. Similarly, an examination light was observed to be available in 70% of the facilities in Province 4 compared with just 27% in Province 2, with a national average of 47%. Family planning kits or counselling kits were observed to be available in 40% of facilities in Province 6 versus 23% in Province 3. In contrast, equipment such as a pelvic model for IUCD and a model for showing correct condom use was available only in a small proportion of facilities across the country, with 12% of facilities in Province 5 having the highest proportion with a pelvic model for IUCD and 27% of facilities in Province 6 having the highest proportion with a model for correct condom use.

**Table 38 Guidelines, trained staff, and basic equipment for family planning services**

Among facilities offering any modern method of family planning, the percentages having family planning guidelines, the percentages having at least one staff member recently trained on family planning service delivery, and the percentages with the indicated equipment observed to be available on the day of the survey, by facility type and province

Background characteristics	Percentages of facilities offering any modern family planning and having:			Equipment							Number of facilities offering any modern method of family planning
	Guidelines on family planning <sup>1</sup>	Family planning register	Staff trained in family planning <sup>2</sup>	Blood pressure apparatus <sup>3</sup>	Examination light	Examination bed or table	FP kit or counselling kit	Pelvic model for IUCD <sup>4</sup>	Model for showing condom use	Other family planning-specific visual aid <sup>5</sup>	
<b>Facility type</b>											
Zonal and above hospitals	29.1	78.9	45.7	100.0	83.4	95.8	58.1	24.9	45.7	75.1	5
District level hospitals	15.8	94.7	65.8	93.4	63.2	97.4	59.2	17.1	27.6	85.5	16
Private hospitals	1.3	18.3	14.1	89.3	79.9	97.3	13.1	5.7	7.2	24.3	49
PHCCs	9.7	94.2	58.8	90.3	53.0	97.6	50.5	7.3	22.3	75.3	42
HPs	14.1	93.1	29.7	85.7	43.1	81.8	29.3	6.0	9.2	61.8	775
UHCs	0.0	88.9	39.8	93.3	58.8	90.6	10.1	13.9	2.3	43.3	32
<b>Province</b>											
Province 1	0.9	85.7	32.4	83.4	42.8	90.7	22.5	4.4	5.7	59.4	157
Province 2	9.9	90.9	30.8	78.7	27.1	79.7	24.3	5.1	6.3	55.2	167
Province 3	8.2	87.6	27.0	88.2	51.7	83.0	22.9	6.5	8.3	44.3	177
Province 4	19.3	86.9	32.1	90.5	70.3	87.3	37.3	6.5	4.4	73.2	119
Province 5	30.8	89.0	26.8	95.4	52.5	83.2	39.0	11.5	17.6	71.4	135
Province 6	19.8	89.2	27.3	87.2	41.6	87.0	39.7	10.9	27.0	67.3	74
Province 7	7.1	97.0	48.0	84.8	43.2	76.5	30.5	2.8	9.1	63.3	89
National average	12.8	89.0	31.3	86.6	46.6	84.0	29.4	6.6	9.9	60.3	919

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

<sup>1</sup> National guidelines on family planning (Nepal Medical Standard Contraceptive Services Volume I) available at the service site on the day of the survey.

<sup>2</sup> The facility had at least one interviewed staff member providing the service who reported receiving in-service training in some aspect of family planning during the 24 months preceding the survey. The training must involve structured sessions; it does not include individual instruction that a provider might have received during routine supervision.

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

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

<sup>5</sup> Flip charts or leaflets.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 5.3 Client Opinion and Knowledge

### 5.3.1 Feedback on major problems

As Table 38 shows, only a small percentage of family planning clients considered specific service issues to be major problems for them on the day of their visit to the facility. Waiting time to see a provider was the problem most mentioned, at only 4% of clients nationwide, and highest in Province 7, at 8%.

**Table 39 Feedback from family planning clients on service problems**

Among interviewed family planning clients, the percentages who considered specific service issues to be major problems for them on the day of the visit, by managing authority and province

Client service issues	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
Behavior/attitude of provider	2.2	0.0	3.2	5.1	0.1	2.6	3.4	0.0	0.5	2.1
Amount of explanation about method	3.2	0.0	0.7	4.6	2.2	0.0	9.1	1.1	5.1	3.2
Wait time to see provider	3.9	12.6	6.5	5.9	1.4	0.5	5.4	0.0	8.3	4.1
Ability to discuss problems	2.5	0.0	1.1	4.9	1.8	0.0	4.5	0.0	3.2	2.4
Availability of medicines at facility	0.8	0.0	0.2	0.0	1.7	0.0	0.3	5.1	0.0	0.8
Number of days facility is open	1.5	0.0	4.8	0.0	0.3	0.5	3.1	0.0	1.4	1.5
Number of hours facility is open	3.1	0.0	6.5	4.1	0.7	0.5	3.4	6.0	3.3	3.0
Cleanliness of facility	2.9	0.0	1.7	9.1	1.7	0.0	1.4	0.0	3.6	2.9
Cost of services	0.1	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.1
Amount of visual privacy	2.4	0.0	0.0	0.4	0.5	0.0	14.1	1.1	4.8	2.3
Amount of auditory privacy	2.0	0.0	0.0	0.0	0.4	0.0	8.8	7.3	6.3	1.9
Number of interviewed family planning clients	753	17	145	125	261	57	88	24	69	770

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

### 5.3.2 Client's knowledge about methods

Table 39 describes client's level of knowledge about family planning methods, showing the proportion of clients who knew the correct response to a question pertaining to specific methods when asked during a client exit interview. Overall, clients had good knowledge about the five methods asked about: any contraceptive pills, male condoms, progestin injectables, IUCDs, and implants. With regard to any contraceptive pills, 87% of clients in Province 1, 99% of clients in Province 3, and cent 100% in all the other provinces responded with a correct answer to the question on frequency of pill use. Likewise, in response to a question on duration of protection from pregnancy by the injectable Depo, the proportion of clients with correct response ranged from 86% (Province 6) to 99% (Province 4), with a national average of 96%. in response to a question on how long a client's contraceptive implant would provide protection from pregnancy, 100% of clients in each of the seven provinces gave a correct response.

**Table 40 Client knowledge about contraceptive methods**

Among interviewed family planning clients who received, were prescribed, or were referred for the indicated method, the percentages who knew the correct response to a question pertaining to the method, by facility type and province

Background characteristics	Percentages who knew the correct response to the question pertaining to the method				
	Any contraceptive pill <sup>1</sup>	Male condom <sup>2</sup>	Progestin injectable <sup>3</sup>	Intrauterine contraceptive device (IUCD) <sup>4</sup>	Implant <sup>5</sup>
<b>Facility type</b>					
Zonal and above hospitals	100.0	79.5	100.0	77.9	100.0
District level hospitals	100.0	-	94.3	79.4	100.0
Private hospitals	100.0	100.0	97.8	100.0	-
PHCCs	96.3	68.9	97.6	65.3	100.0
HPs	96.5	100.0	96.1	-	100.0
UHCs	100.0	50.0	98.9	-	-
<b>Province</b>					
Province 1	87.2	84.8	98.5	-	100.0
Province 2	100.0	100.0	96.3	100.0	100.0
Province 3	99.2	81.3	96.3	77.1	100.0
Province 4	100.0	100.0	99.4	100.0	100.0
Province 5	100.0	92.9	96.4	70.6	100.0
Province 6	100.0	-	86.0	0.0	100.0
Province 7	100.0	87.7	93.3	100.0	100.0
National average	96.9	88.5	96.3	76.2	100.0

Note: The denominator for each method is different and not shown in this table.

The questions asked for each of the methods are as follows:

<sup>1</sup> Any pill: How often do you take the pill?

<sup>2</sup> Male condom: How many times can you use one condom?

<sup>3</sup> Progestin-only injectable (Depo): For how long does the injection provide protection from pregnancy?

<sup>4</sup> IUCD: What can you do to make sure that your IUCD is in place?

<sup>5</sup> Implant: For how long will your implant provide protection from pregnancy?

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 5.4 Supportive Management and Training of Service Providers

### 5.4.1 General training and supervision

Table 40 presents the proportion of interviewed family planning service providers who reported receiving training related to their work and received personal supervision during the specified time periods. Overall, few providers reported having received training related to family planning during the past 24 months, from only 13% in Province 5 to 24% in Province 7, with a national average of 16%. In contrast, 72% of providers nationwide said they received personal supervision during the six months preceding the survey, ranging from 65% in Province 1 to 79% in Province 5.

**Table 41 Supportive management for providers of family planning services**

Among interviewed family planning service providers, the percentages who reported receiving training related to their work and personal supervision during the specified time periods, by facility type and province

Background characteristics	Percentages of interviewed providers who received:			Number of interviewed providers of family planning services
	Training related to family planning during the 24 months preceding the survey <sup>1</sup>	Personal supervision during the 6 months preceding the survey <sup>2</sup>	Training related to family planning during the 24 months and personal supervision during the 6 months preceding the survey	
<b>Facility type</b>				
Zonal and above hospitals	17.3	62.9	11.8	45
District level hospitals	23.9	65.6	14.7	126
Private hospitals	5.9	62.9	4.8	251
PHCCs	21.9	74.2	15.4	221
HPs	15.9	73.6	12.4	2,220
UHCs	36.5	75.4	24.0	65
<b>Province</b>				
Province 1	17.3	64.6	11.9	486
Province 2	15.0	76.6	12.4	526
Province 3	13.8	70.1	10.0	590
Province 4	18.7	72.8	12.6	374
Province 5	13.1	78.8	12.1	430
Province 6	14.9	65.5	10.7	200
Province 7	24.0	75.6	18.1	322
National average	16.3	72.3	12.3	2,928

<sup>1</sup> 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> Personal supervision refers to any form of technical support or supervision from a facility-based supervisor or from a visiting supervisor. It may include, but is not limited to, review of records and observation of work, with or without any feedback to the health worker.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

#### 5.4.2 In-service training

Table 41 provides information on specific in-service training received by family planning service providers during the specified period, as reported by the providers. The proportion of providers who reported receiving in-service training during the past 24 months on general counselling for family planning ranged between 7% (Province 2) and 15% (Province 7), with a national average of 11%. The proportion of providers who reported having received in-service training during the past 24 months on non-scalpel vasectomy, minilap tubal ligation, insertion/removal of IUCD, family planning for HIV+ clients, and postpartum family planning—which are all considered best practices—was below 10% for each of the provinces and as a national average.

**Table 42 Training for family planning service providers**

Among interviewed family planning (FP) service providers, the percentages who reported receiving in-service training on topics related to family planning during the specified time periods preceding the survey, by facility type and province

Background characteristics	Percentages of providers of FP services who report receiving in-service training <sup>1</sup> on:														Number of interviewed providers of family planning services
	General counselling for FP		Non-scalpel vasectomy (NSV)		Minilap tubal ligation		Insertion/removal of IUCD <sup>2</sup>		Insertion/removal of Implant		FP for HIV+ clients		Post-partum FP		
	During the past 24 months	At anytime	During the past 24 months	At anytime	During the past 24 months	At anytime	During the past 24 months	At anytime	During the past 24 months	At anytime	During the past 24 months	At anytime	During the past 24 months	At anytime	
<b>Facility type</b>															
Zonal and above hospitals	10.3	57.3	0.0	8.7	0.0	14.5	6.2	31.2	7.1	28.5	5.7	24.0	5.4	16.1	45
District level hospitals	16.1	43.1	5.2	8.5	3.5	8.2	11.6	35.3	6.2	23.0	3.9	7.7	4.0	10.4	126
Private hospitals	4.3	18.5	0.2	4.4	1.2	7.9	1.8	14.4	0.6	12.3	0.2	4.1	1.1	6.3	251
PHCCs	11.8	47.3	1.2	1.9	1.0	3.8	9.2	29.1	7.7	23.2	3.0	6.4	3.2	9.2	221
HPs	10.7	42.6	0.1	1.1	0.0	1.4	3.7	9.8	4.7	9.2	1.5	4.5	1.9	8.8	2,220
UHCs	30.6	48.1	1.4	1.4	1.4	1.4	5.3	10.7	6.0	6.0	5.0	5.0	5.0	7.9	65
<b>Province</b>															
Province 1	12.7	40.7	0.4	1.8	0.1	2.0	4.3	14.2	2.5	11.0	1.6	2.8	2.5	9.9	486
Province 2	6.6	54.5	0.0	2.9	0.2	3.1	5.1	15.9	4.8	12.7	2.3	5.5	1.5	6.8	526
Province 3	9.3	36.7	0.3	1.2	0.3	2.6	3.8	13.4	5.2	12.4	1.3	4.4	0.6	5.3	590
Province 4	13.9	36.3	0.5	1.0	0.1	2.4	3.6	10.1	5.9	9.3	0.4	2.7	1.6	6.2	374
Province 5	10.3	39.4	0.7	2.1	1.0	3.5	3.8	12.0	3.5	9.5	1.8	7.0	2.2	9.7	430
Province 6	12.5	37.2	0.9	1.8	0.2	1.4	2.1	9.4	1.5	7.2	0.5	4.2	3.0	11.0	200
Province 7	14.9	39.7	0.7	2.4	1.0	3.1	7.0	13.4	9.0	14.8	3.7	9.8	5.4	16.8	322
National average	10.9	41.3	0.4	1.9	0.4	2.7	4.3	13.1	4.7	11.3	1.7	5.1	2.1	8.7	2,928

<sup>1</sup> 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> IUCD = intrauterine contraceptive device

Source: MoHP, ICF and Abt analysis of 2015 NHFS data





## 6 ANTENATAL CARE

### Key Findings

- Across each of the seven provinces, more than 94% facilities offered services. Among facilities offering services, the proportion offering services five or more days a week ranged from 70% (Province 5) to 93% (Province 1).
- The proportion of facilities having the capacity to conduct hemoglobin tests ranged from 9% (Province 6) to 24% (Province 3).
- The proportion of facilities with all essential medicines (iron and folic acid combined tablets, and albendazole tablets) ranged from 69% (Province 2) to 99% (Province 4 and 5).
- Among the facilities offering services, the proportion with PMTCT services ranged from 10% (Province 4) to 40% (Province 7).

In Chapter 6 we present the results on the availability of ANC services. This includes analysis on service readiness in terms of whether the facility had service guidelines, trained staff and equipment, testing capacity, and essential medicines for ANC services; client opinions about ANC services; availability of supportive management and training of ANC service providers; and availability of prevention of mother-to-child transmission (PMTCT) services. This information was collected through the facility inventory questionnaire, the health provider questionnaire, and the observation protocols.

### 6.1 Availability of Antenatal Care Services

Table 42 presents the proportion of facilities offering ANC services and the proportion offering the service on the indicated number of days per week among facilities offering ANC services. Across each of the seven provinces, according to health workers, more than 94% facilities offered ANC services. Among those offering ANC services, the proportion of facilities offering ANC services five or more days a week ranged from 70% (Province 5) to 93% (Province 1), with a national average of 85%.

**Table 43 Availability of antenatal care services**

Among all facilities, the percentages 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 facility type and province

Background characteristics	Percentages of facilities that offer ANC	Number of facilities	Percentages of facilities offering ANC where ANC services are offered the indicated number of days per week <sup>1</sup>			Number of facilities offering ANC services
			1-2 days per week	3-4 days per week	5 or more days per week	
<b>Facility type</b>						
Zonal and above hospitals	100.0	6	25.7	11.0	63.3	6
District level hospitals	96.1	16	34.2	0.0	64.4	15
Private hospitals	86.4	70	3.9	0.0	96.1	60
PHCCs	100.0	42	19.4	1.0	78.2	42
HPs	98.8	775	12.0	0.2	84.8	765
UHCs	96.8	32	0.0	0.0	100.0	31
<b>Province</b>						
Province 1	97.9	164	6.6	0.1	93.1	160
Province 2	94.3	171	25.6	0.3	73.1	161
Province 3	98.9	185	6.3	0.7	92.2	183
Province 4	98.8	119	7.1	0.2	90.3	118
Province 5	97.7	138	19.8	0.0	69.7	135
Province 6	99.4	74	5.4	0.0	91.3	74
Province 7	99.5	89	7.2	0.2	90.9	89
National average	97.8	940	11.8	0.2	85.3	919

Note: Standalone HTC sites, Sukraraj and Kanti hospitals are excluded from this and other tables in this chapter.

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

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 6.2 Service Readiness

### 6.2.1 Service guidelines, trained staff, and equipment

Table 43 describes the availability of service guidelines, trained staff, and equipment for ANC services. More than 94% of facilities nationwide offered ANC services. Among facilities offering ANC services, the proportion reporting having guidelines on ANC (reproductive health clinical protocol or other relevant guidelines such as maternity guidelines or national medical standard volume III) ranged from 15% (Province 1) to 47% (Province 5), with a national average of 25%. Similarly, the proportion of facilities having at least one staff member trained on ANC services ranged from 16% (Province 4) to 47% (Province 7), with a national average of 27%. A relatively higher proportion of facilities reported having maternal and newborn health registers, lowest at 71% in Province 6 and highest at 82% in Province 1, with a national average of 76%.

There are four pieces of critical equipment for ANC as per the guidelines on ANC: 1) blood pressure apparatuses, 2) adult scales, 3) fetal stethoscopes, and 4) measuring tape. Of these, enumerators observed blood pressure apparatuses in more than three-fourths of the facilities nationwide and stethoscopes, adult weight scales, and fetal stethoscopes in more than 85% of facilities. However, they only found measuring tape for measuring the fundal height in 30% of facilities nationwide, with a range from 20% (Province 2) to 41% (Provinces 3 and 4).

**Table 44 Guidelines, trained staff, and basic equipment for antenatal care services**

Among facilities offering antenatal care (ANC) services, the percentages having guidelines, at least one staff member recently trained on ANC service delivery, and the indicated equipment observed to be available on the day of the survey, by facility type and province

Background characteristics	Percentages of facilities offering ANC that have:			Equipment					Number of facilities offering ANC services	
	Guidelines on ANC <sup>1</sup>	Maternal and newborn health register	Staff trained for ANC <sup>2</sup>	Blood pressure apparatus <sup>3</sup>	Stethoscope	Adult weighing scale	Fetal stethoscope	Measuring tape <sup>4</sup>		All items
<b>Facility type</b>										
Zonal and above hospitals	18.3	51.3	22.0	100.0	100.0	96.3	84.6	51.6	0.0	6
District level hospitals	27.4	84.9	61.6	91.8	94.5	97.3	97.3	49.3	9.6	15
Private hospitals	4.3	5.7	11.5	94.8	95.2	91.8	77.5	50.6	0.0	60
PHCCs	24.2	81.0	48.5	91.3	95.2	91.6	98.5	45.7	3.4	42
HPs	27.5	81.8	26.4	84.4	87.4	85.4	91.8	26.7	2.1	765
UHCs	4.0	54.0	22.2	94.3	100.0	92.3	89.9	33.4	0.0	31
<b>Province</b>										
Province 1	14.8	81.5	29.4	84.0	86.6	89.0	89.2	22.7	0.7	160
Province 2	24.1	73.6	16.9	83.7	87.1	88.3	86.5	19.9	0.1	161
Province 3	17.9	69.9	22.5	89.0	90.4	82.3	90.8	40.8	1.6	183
Province 4	31.4	78.3	15.6	90.3	90.5	87.5	95.1	41.3	2.2	118
Province 5	46.7	78.8	34.6	91.5	93.3	87.4	95.5	33.7	7.1	135
Province 6	24.8	71.0	33.1	79.0	86.1	86.3	86.0	20.9	0.6	74
Province 7	18.2	77.1	47.4	78.5	86.3	85.4	96.1	25.2	2.1	89
National average	25.0	75.7	26.9	85.9	88.9	86.6	91.1	29.9	2.0	919

<sup>1</sup> RH clinical protocol for medical officers, staff nurses and ANMs, or other guidelines relevant to antenatal care, such as maternity guideline or national medical standard (NMS) volume III

<sup>2</sup> Facility has at least one interviewed staff member providing ANC services who reports receiving in-service training in some aspect of antenatal care 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> Functioning digital blood pressure apparatus or else a functioning manual sphygmomanometer and a stethoscope

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

<sup>5</sup> All items include guidelines on ANC, staff trained in ANC, blood pressure apparatus, stethoscope, adult weighing scale, fetal stethoscope and measuring tape all available.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 6.2.2 Laboratory tests – testing capacity

The 2015 NHFS 2015 assessed the availability of basic tests important for ANC services, including hemoglobin, urine protein, urine glucose, blood grouping, syphilis, and HIV. Table 44 reports findings on availability of the following tests: hemoglobin, urine protein, urine glucose, and HIV. According to enumerator observations, the proportion of facilities having the capacity to conduct hemoglobin tests ranged from 9% (Province 6) to 24% (Province 3), with a national average of 15%. A similar proportion of facilities in each of the seven provinces had the capacity to conduct urine protein and urine glucose tests, with a province-level range of 10 to 20% for both the tests. However, we found that HIV testing capacity was available in a relatively lower proportion of facilities (3% nationwide) with a range from 2% (Province 1 and 4) to 5% (Province 3).

**Table 45 Testing capacity**

Among facilities offering antenatal care (ANC) services, the percentages having the capacity to conduct the indicated tests at the facility, by facility type and province

Background characteristics	Percentages of facilities offering ANC that have the indicated tests							Number of facilities offering ANC services
	Hemoglobin <sup>1</sup>	Urine protein <sup>2</sup>	Urine glucose <sup>3</sup>	Blood grouping and Rhesus factor <sup>4</sup>	Syphilis <sup>5</sup>	HIV <sup>6</sup>	Three basic test <sup>7</sup>	
<b>Facility type</b>								
Zonal and above hospitals	96.3	96.3	96.3	22.0	84.6	73.6	73.6	6
District level hospitals	97.3	100.0	98.6	13.7	83.6	56.2	54.8	15
Private hospitals	93.7	91.7	93.2	18.4	85.5	14.0	14.0	60
PHCCs	74.7	65.5	63.5	1.5	52.4	11.2	10.2	42
HPs	3.7	4.8	2.5	0.0	1.4	0.5	0.4	765
UHCs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31
<b>Province</b>								
Province 1	13.5	13.3	12.0	0.8	9.5	1.9	1.9	160
Province 2	12.3	12.2	12.0	2.0	10.4	4.0	3.4	161
Province 3	23.7	20.2	19.2	3.1	16.1	4.6	4.5	183
Province 4	12.1	18.1	11.2	1.7	11.0	2.1	1.9	118
Province 5	13.3	12.9	11.6	1.3	9.8	3.3	3.2	135
Province 6	8.6	17.0	12.2	0.3	6.7	2.5	2.5	74
Province 7	14.4	12.5	12.5	0.9	10.1	3.6	3.6	89
National average	14.8	15.2	13.3	1.6	11.1	3.3	3.1	919

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

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

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

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

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

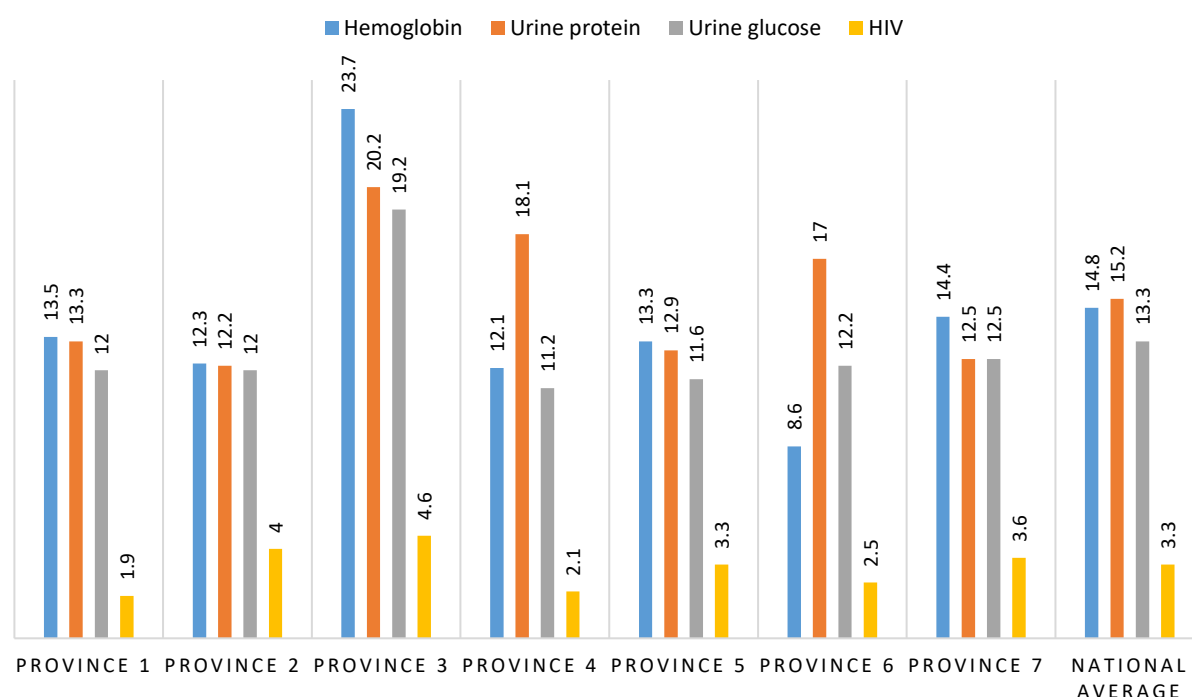
<sup>5</sup> Rapid test for syphilis or Venereal Disease Research Laboratory (VDRL) test or polymerase chain reaction (PCR) or rapid plasma reagin (RPR).

<sup>6</sup> Facility reports conducting HIV testing at the facility and had at least one unexpired Determine, at least one unexpired Uni-Gold and at least one unexpired Stat Pak HIV rapid diagnostic test kit available somewhere in the facility on the day of the survey, or else facility had ELISA testing capacity or other HIV testing capacity observed in the facility on the day of the survey.

<sup>7</sup> Facility had the capacity to conduct the following three tests at the facility on the day of the survey: urine protein test, urine glucose test and HIV diagnostic test.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Figure 6 Testing capacity for antenatal care services (%)**



## 6.2.3 Medicines

### Availability of essential medicines

Table 45 and Figure 7 depict the proportion of facilities with essential medicines for ANC observed to be available on the day of the survey among facilities offering ANC services. The proportion of facilities with all essential ANC medicines (iron and folic acid combined tablets, and albendazole tablets) ranged from 69% (Province 2) to 99% (Province 4 and 5), with a national average of 90%.

**Table 46 Availability of medicines for routine antenatal care**

Among facilities offering antenatal care (ANC) services, percentages with essential medicines for ANC observed to be available on the day of the survey, by background characteristics, Nepal Health Facility Survey, 2015

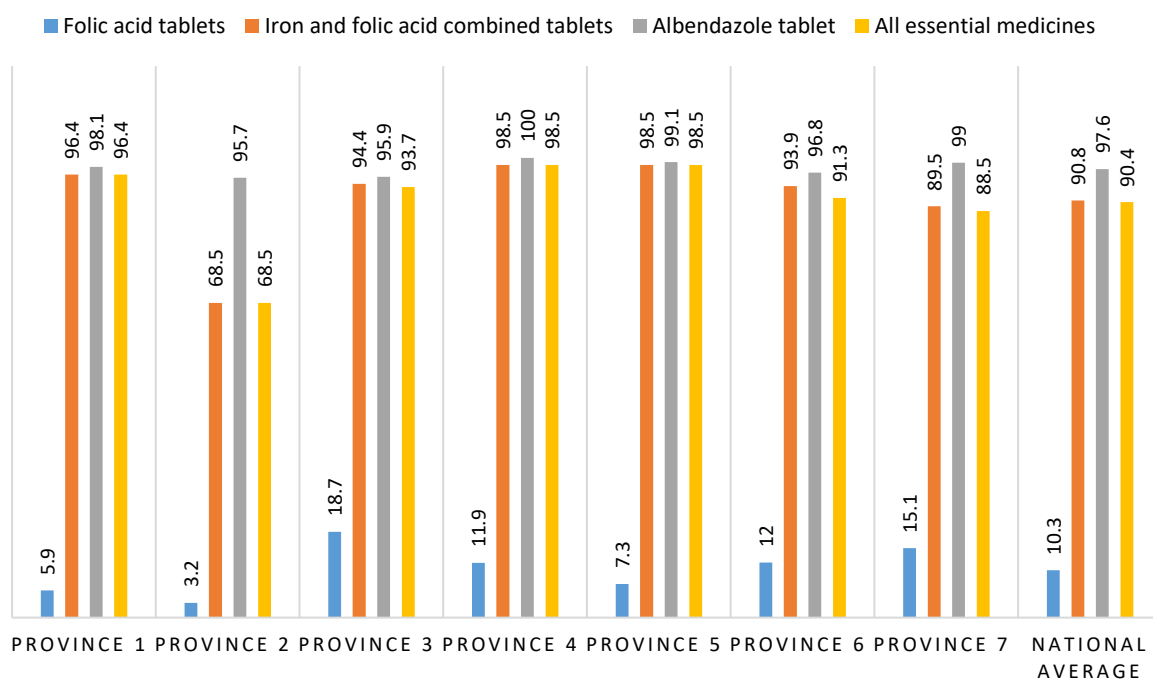
Background characteristics	Percentages of facilities offering ANC that have indicated medicines				Number of facilities offering ANC services
	Folic acid tablets	Iron and folic acid combined tablets	Albendazole tablet	All essential medicines	
<b>Facility type</b>					
Zonal and above hospitals	37.7	81.4	92.7	81.4	6
District level hospitals	32.9	90.4	100.0	90.4	15
Private hospitals	65.2	69.7	76.7	69.7	60
PHCCs	12.1	93.2	100.0	93.2	42
HPs	5.5	92.2	99.0	91.6	765
UHCs	3.4	97.8	100.0	97.8	31
<b>Province</b>					
Province 1	5.9	96.4	98.1	96.4	160
Province 2	3.2	68.5	95.7	68.5	161
Province 3	18.7	94.4	95.9	93.7	183
Province 4	11.9	98.5	100.0	98.5	118
Province 5	7.3	98.5	99.1	98.5	135
Province 6	12.0	93.9	96.8	91.3	74
Province 7	15.1	89.5	99.0	88.5	89
National average	10.3	90.8	97.6	90.4	919

Note: Medicines for treatment of active malaria and for intermittent preventive treatment of malaria in pregnancy (IPTp) are presented in Table 6.17.

<sup>1</sup> All essential medicines include iron and folic acid combined tablet, and albendazole tablets.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Figure 7 Availability of medicines for routine antenatal care (%)**



## 6.3 Client Opinions

### 6.3.1 Feedback from antenatal clients

Table 46 presents the proportion of interviewed ANC clients who considered specific service issues to be major problems for them on the day of the visit. Nationwide, 12% of the caretakers considered waiting time as a major problem; this proportion was highest at 15% in Province 2 and lowest at <1% in Province 4. Similarly, on average nationally, 22% of clients had at least one complaint, with the proportion ranging from 4% (Province 4) to 38% (Province 1).

**Table 47 Feedback from antenatal care clients**

Among interviewed antenatal care (ANC) clients, the percentages who considered specific service issues to be major problems for them on the day of the visit, by managing authority and province

Client service issue	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
Behavior/attitude of provider	1.0	0.1	0.7	1.7	0.6	1.1	0.2	0.0	0.6	0.8
Amount of explanation about problem of treatment	3.6	7.6	11.2	4.7	1.8	2.6	2.3	0.4	5.6	4.4
Wait to see provider	11.2	12.5	11.6	14.5	12.4	0.0	13.8	2.5	6.2	11.5
Ability to discuss problems	3.5	8.1	11.3	4.7	1.6	0.0	4.5	1.4	3.1	4.4
Availability of medicines at facility	3.6	3.7	8.5	4.8	1.6	0.4	0.9	6.0	3.9	3.6
Number of days facility is open	2.5	3.5	7.8	0.0	0.7	0.7	2.1	10.6	6.3	2.7
Number of hours facility is open	2.9	3.6	9.1	0.0	2.2	0.7	1.3	1.0	7.9	3.1
Cleanliness of facility	3.0	1.1	4.3	4.8	1.7	0.0	1.5	0.4	2.2	2.7
Cost of services	1.0	8.4	7.9	0.4	1.6	2.5	0.2	1.0	3.8	2.4
Amount of visual privacy	2.0	0.3	1.1	0.4	1.6	0.4	4.7	0.4	2.5	1.7
Amount of auditory privacy	2.0	2.5	3.7	0.4	1.9	0.4	4.3	0.4	1.4	2.1
At least one complaint	20.5	27.1	37.6	22.4	18.0	4.4	20.2	14.5	18.0	21.8
Number of interviewed ANC clients	1,211	292	261	309	476	83	224	53	96	1,502

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 6.4 Supportive Management and Training of Service Providers

### 6.4.1 General training and supervision

Table 47 presents the proportion of interviewed ANC service providers who reported receiving training related to their work and personal supervision during the specified time periods. Overall, only a small proportion of providers received training related to ANC during the past 24 months, from 11% in Province 2 to 32% in Province 7, with a national average of 18%. In contrast, nationally, 72% of providers received personal supervision during the six months preceding the survey, ranging from 65% in Province 3 to 79% in Province 5.

**Table 48 Supportive management for providers of antenatal care services**

Among interviewed antenatal care (ANC) providers, the percentages who received training related to their work and personal supervision during the specified time periods, by facility type and province

Background characteristics	Percentages of interviewed providers who received:				Number of interviewed ANC service providers
	Training related to ANC during the 24 months preceding the survey <sup>1</sup>	Training related to ANC ever <sup>1</sup>	Personal supervision during the 6 months preceding the survey <sup>2</sup>	Training related to ANC during the 24 months and personal supervision during the 6 months preceding the survey	
<b>Facility type</b>					
Zonal and above hospitals	9.1	37.7	65.6	7.3	50
District level hospitals	22.8	42.6	65.0	15.1	126
Private hospitals	4.9	16.9	57.4	2.9	327
PHCCs	25.3	47.2	75.2	19.5	182
HPs	19.9	41.8	74.9	16.1	1,744
UHCs	16.9	34.2	77.1	14.1	52
<b>Province</b>					
Province 1	15.5	41.7	67.8	11.1	461
Province 2	10.8	34.9	75.9	10.0	407
Province 3	17.8	30.7	64.7	12.7	542
Province 4	11.8	31.3	75.2	9.1	283
Province 5	21.4	41.4	78.7	18.1	344
Province 6	26.1	50.5	68.3	19.2	161
Province 7	32.0	52.2	78.0	26.9	282
National average	18.2	38.7	72.0	14.3	2,480

<sup>1</sup>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> Personal supervision refers to any form of technical support or supervision from a facility-based supervisor or from a visiting supervisor. It may include, but is not limited to, review of records and observation of work, with or without any feedback to the health worker.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 6.4.2 In-service training

Table 48 provides information on specific in-service training received by the ANC service providers during the specified period, as reported by the providers. The proportion of providers who reported receiving in-service training during the past 24 months on counselling for ANC ranged from 6% (Province 2) to 19% (Province 6), with a national average of 8%. Likewise, the proportion of providers who reported receiving in-service training during the past 24 months on complications of pregnancy and their management ranged from 5% (Province 2) to 21% (Province 6), with a national average of 8%.

**Table 49 Training for antenatal care service providers**

Among interviewed antenatal care (ANC) service providers, the percentages who reported receiving in-service training on topics related to ANC during the specified period before the survey, by facility type and province

Background characteristics	Percentages of interviewed providers of ANC who reported receiving in-service training on:													Number of interviewed ANC service providers
	Counselling for ANC <sup>1</sup>		ANC screening <sup>2</sup>		Complications of pregnancy and their management		Nutritional assessment of the pregnant woman		Case management or treatment of malaria in pregnancy		Essential Nutrition Actions training			
	During the past 24 months	At anytime	During the past 24 months	At anytime	During the past 24 months	At anytime	During the past 24 months	At anytime	During the past 24 months	At anytime	During the past 24 months	At anytime		
<b>Facility type</b>														
Zonal and above hospitals	5.1	24.3	3.7	25.4	5.1	24.6	1.8	15.5	0.0	0.7	3.3	5.1	50	
District level hospitals	8.9	21.0	8.1	20.5	9.7	23.3	7.2	16.4	1.7	3.2	5.8	11.1	126	
Private hospitals	1.9	12.1	1.1	9.8	2.0	11.9	2.1	9.1	0.0	0.7	0.0	1.4	327	
PHCCs	11.2	28.6	10.0	26.7	11.8	29.6	7.9	19.1	1.9	7.5	6.4	12.5	182	
HPs	9.3	27.8	9.0	25.4	9.4	25.7	5.7	16.3	2.3	8.9	5.7	16.6	1,744	
UHCs	5.8	16.9	5.8	16.9	5.8	16.9	5.3	13.4	2.8	6.4	3.2	5.8	52	
<b>Province</b>														
Province 1	6.6	28.0	7.7	26.0	6.8	25.5	3.8	16.8	4.9	11.3	1.6	12.3	461	
Province 2	5.8	24.4	5.3	21.3	5.4	20.7	3.8	14.5	0.2	8.8	3.7	14.0	407	
Province 3	7.1	18.7	6.8	16.9	7.5	18.8	5.7	12.8	2.3	4.1	3.8	9.6	542	
Province 4	9.3	22.8	9.2	24.2	9.6	21.4	6.0	15.4	0.2	5.9	3.2	9.3	283	
Province 5	6.7	22.6	6.3	19.7	7.3	22.9	3.6	12.5	2.2	9.4	6.0	12.8	344	
Province 6	19.1	44.4	14.3	33.9	21.1	42.5	13.9	26.2	0.2	3.1	4.3	19.1	161	
Province 7	11.4	28.6	10.2	29.3	10.2	28.2	6.2	17.7	1.3	5.1	15.0	24.8	282	
National average	8.3	25.2	7.8	23.0	8.4	23.8	5.4	15.5	1.9	7.2	4.9	13.6	2,480	

Note: 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>1</sup> ANC counseling includes topics such as nutrition, family planning and newborn care.

<sup>2</sup> ANC screening includes topics such as blood pressure monitoring, urine glucose and urine protein.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 6.5 Prevention of Mother-to-Child Transmission of HIV

### 6.5.1 Availability of PMTCT services

Table 49 shows availability of PMTCT services, with the proportion of facilities offering services for PMTCT of HIV, among those offering ANC services, and the proportion of facilities with specific PMTCT program components, among those with PMTCT services. Among the facilities offering ANC services, the proportion of facilities with PMTCT services ranged from 10% (Province 4) to 40% (Province 7), with a national average of 18%.

Among facilities with PMTCT services, across each of the seven provinces nearly all had HIV testing and counselling for pregnant women, at 99% of facilities in Province 1 and 100% in all the other provinces. The proportion of facilities with HIV testing for infants born to HIV+ women ranged from 37% (Province 5) to 91% (Province 2), with a national average of 62%. Similarly, the proportion of facilities offering nutritional counselling for HIV+ pregnant women and their infants ranged from 62% (Province 2) to 91% (Province 7), with a national average of 79%. Likewise, a high of 98% of facilities in Province 4 and a low of 63% of facilities in Province 2 offered family planning counselling for HIV+ women, with a national average of 83%. A relatively lower proportion of facilities across all provinces, however, offered other services such as ARV prophylaxis for HIV+ women and ARV prophylaxis for infants born to HIV+ women.



**Table 50 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 facility type and province

Background characteristics	Percentages of facilities offering ANC that provide any PMTCT <sup>1</sup>	Number of facilities offering ANC services	Percentages of ANC facilities offering PMTCT that provide:							Number of facilities offering ANC and any PMTCT services	Number of facilities offering ANC and any PMTCT services excluding PHCCs, HPs and UHCs <sup>2</sup>
			HIV testing and counselling 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 counselling	Nutritional counselling for HIV+ pregnant women and their infants	Family planning counselling for HIV+ women		
<b>Facility type</b>											
Zonal and above hospitals	78.0	6	100.0	70.9	65.8	61.1	95.3	95.3	100.0	4	4
District level hospitals	56.2	15	100.0	68.3	46.3	46.3	95.1	92.7	92.7	8	8
Private hospitals	22.0	60	100.0	55.1	6.2	6.2	87.0	88.6	90.1	13	13
PHCCs	39.8	42	98.8	-	12.2	12.2	89.0	78.0	85.4	17	0
HPs	15.8	765	100.0	-	6.0	6.0	78.7	77.5	82.1	121	0
UHCs	9.5	31	100.0	-	0.0	0.0	38.9	38.9	38.9	3	0
<b>Province</b>											
Province 1	14.5	160	99.1	57.7	15.7	14.8	81.7	78.1	82.6	23	4
Province 2	12.3	161	100.0	90.6	13.8	13.8	58.9	61.9	62.9	20	2
Province 3	14.4	183	100.0	63.9	6.2	6.2	87.0	86.3	86.3	26	7
Province 4	9.7	118	100.0	67.1	14.4	14.4	94.6	92.8	98.2	11	3
Province 5	26.8	135	100.0	36.6	5.1	5.1	72.3	67.4	80.3	36	6
Province 6	19.3	74	100.0	85.7	2.9	2.9	70.4	78.9	80.4	14	1
Province 7	40.3	89	100.0	76.9	13.9	13.9	96.9	90.9	92.3	36	3
National average	18.2	919	99.9	62.0	10.1	10.0	81.0	79.0	83.3	167	26

Note: ARV = antiretroviral.

<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, and family planning counseling for HIV-positive pregnant women.

<sup>2</sup> This denominator is for the indicator "HIV testing for infants born to HIV+ women".

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 6.5.2 Availability of guidelines, trained staff, medicines, and diagnostics

Table 50 provides information on availability of guidelines, trained staff, medicines, and diagnostics for prevention of mother to child transmission of HIV. Only 6% of facilities nationwide had PMTCT guidelines, with the highest proportion at 12% in Province 4. Nationwide, two in every five facilities had at least one ANC provider who received training on some aspect of PMTCT during the 24 months preceding the survey. The proportion ranged from 10% (Province 2) to 65% (Province 7).

With regard to availability of visual and auditory privacy, the proportion ranged from 80% (Province 6) to 98% (Province 4). Similarly, HIV testing capacity was available in 12% of facilities nationwide, and among provinces the proportion ranged from 5% (Province 1) to 25% (Province 2). The availability of zidovudine (AZT) syrup and nevirapine (NVP) syrup was relatively low across the provinces, with less than 10% of facilities having it in each of the provinces.

**Table 51 Guidelines, trained staff, equipment, diagnostic capacity, and medicines for prevention of mother-to-child transmission of HIV**

Among facilities offering antenatal care (ANC) and any services for prevention of mother-to-child transmission (PMTCT) of HIV, the percentages having relevant guidelines, at least one staff member recently trained on PMTCT and infant and young child feeding, visual and auditory privacy for quality PMTCT counselling, HIV diagnostic capacity, and antiretroviral medicines (ARVs), by facility type and province

Background characteristics	Percentages having guide-lines		Percentages having staff trained in		Percent-ages having	Percentages having HIV testing		Percentages having antiretroviral medicines			Number of facilities offering ANC and any PMTCT services	Number of facilities offering ANC and any PMTCT services excluding PHCCs, HPs and UHCs <sup>10</sup>
	PMTCT <sup>1</sup>	PMTCT <sup>2</sup>	Infant and young child feeding <sup>3</sup>	Visual and auditory privacy <sup>4</sup>	Adult HIV testing capacity <sup>5</sup>	DBS <sup>6</sup>	AZT syrup <sup>7</sup>	NVP syrup <sup>8</sup>	ARV for maternal prophylaxis <sup>9</sup>			
<b>Facility type</b>												
Zonal and above hospitals	47.0	23.5	9.4	94.9	75.6	28.2	18.8	70.5	79.9	4	4	
District level hospitals	14.6	56.1	36.6	92.7	65.9	12.2	19.5	46.3	58.5	8	8	
Private hospitals	3.1	6.6	6.6	91.4	23.2	7.9	0.0	4.7	4.7	13	13	
PHCCs	14.6	51.2	35.4	93.9	18.3	0.0	2.4	4.9	6.1	17	0	
HPs	3.4	42.3	26.3	83.7	3.4	-	1.7	0.8	0.8	121	0	
UHCs	0.0	21.2	21.2	43.4	0.0	-	0.0	0.0	0.0	3	0	
<b>Province</b>												
Province 1	2.7	26.3	21.9	82.3	5.3	8.8	1.8	3.5	3.5	23	5	
Province 2	2.1	33.6	8.2	87.8	24.8	9.4	2.1	5.2	7.3	20	2	
Province 3	6.4	44.8	30.4	91.2	11.2	6.0	0.8	4.7	6.2	26	7	
Province 4	12.6	20.1	16.5	98.2	19.8	24.7	1.8	9.0	12.6	11	3	
Province 5	7.3	42.6	24.3	82.2	10.1	14.6	2.9	4.0	5.7	36	6	
Province 6	4.3	10.1	5.8	79.6	8.7	0.0	2.9	5.8	4.3	14	1	
Province 7	8.0	65.2	46.5	83.3	8.3	30.8	6.2	8.3	8.3	36	3	
National average	6.2	40.2	25.7	85.4	11.5	12.6	2.9	5.6	6.6	167	26	

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

<sup>1</sup> Guideline for PMTCT: Hand-written guidelines pasted on a wall are acceptable.

<sup>2</sup> Facility has at least one interviewed provider of ANC and PMTCT services who reported receiving in-service training in some aspect of PMTCT 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 ANC and PMTCT services who reported receiving in-service training in some aspect of infant and young child feeding 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> A private room or screened-off area is available in the ANC 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>5</sup> HIV rapid testing or other HIV testing capacity available in the facility.

<sup>6</sup> Facility reports that they perform HIV testing for infants and have dried blood spot (DBS) filter paper available for collection of blood samples from infants for HIV testing.

<sup>7</sup> Zidovudine (AZT) syrup for ARV prophylaxis for children born to HIV-positive women.

<sup>8</sup> Nevirapine (NVP) syrup for ARV prophylaxis for children born to HIV-positive women.

<sup>9</sup> Facility had any of the following ARV medicines for adults available at the facility on the day of the survey: AZT/NVP/3TC, TDF/3TC/EFV, AZT/3TC + EFV or TDF/3TC + NVP.

<sup>10</sup> This denominator is for the indicator "DBS" under HIV testing.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 7 DELIVERY AND NEWBORN CARE

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### Key Findings

- *Nearly 50% of providers nationwide provide normal vaginal delivery services, ranging from an average of 23% of facilities in Province 2 to 83% in Province 6.*
- *Among the facilities that provide normal vaginal delivery services, only 15% of facilities in Province 4 provide assisted delivery, while up to 42% of facilities in Province 2 show a capacity to assist in delivery. Similarly, only 13% of facilities in Province 7 provide medical abortion compared with up to 42% of facilities in Province 2.*
- *The proportion of facilities with all essential medicines for delivery (e.g. injectable uterotonic, injectable antibiotic, skin antiseptic, and intravenous fluids with infusion set) ranged from 8% in Province 4 to 18% in Province 5.*
- *The proportion of facilities with all essential medicines for newborns (tetracycline eye ointment, 4% chlorhexidine gel, injectable gentamicin, ceftriaxone powder for injection, and amoxicillin suspension or dispersible pediatric dosed tablet) was less than 2% across all provinces.*

In this chapter we present the key findings of a facility inventory and service provider questionnaire for health facilities that offer normal vaginal and newborn care services across seven provinces, with a focus on the different facility types—zonal and district hospitals, private hospitals, PHCCs, HPs, and UHCs. We report on findings of the following services across facility types and provinces: availability of delivery care services; service readiness, which includes service guidelines, trained staff and equipment; and medicines and commodities for delivery and newborn care. We also report on signal functions for emergency obstetric and newborn care (EmONC), newborn care practices, and supportive management and training of service providers.

### 7.1 Availability of Delivery Care Services

#### 7.1.1 Availability of normal vaginal delivery and other maternal health services

Table 51 presents the percentage of facilities that offer normal vaginal delivery and caesarean delivery services. Among the facilities that provide normal vaginal delivery and caesarean delivery services, we also present the percentage of facilities offering specific maternal health services, as well as the share of facilities that have skilled providers available on-site or on-call 24 hours a day.

Nearly 50% of providers nationwide provide normal vaginal delivery services, ranging from an average of 23% of facilities in Province 2 to 83% in Province 6. If primary health care centers (PHCCs), health posts (HPs) and urban health centers (UHCs) are excluded, the percentage of facilities that report offering caesarean delivery is moderately higher, with a national average of nearly 53%, and ranging from 38% in Province 5 to 65% in Province 2. Among the facilities that provide normal vaginal delivery services, we found that on average about 26% of facilities provide specific maternal health services, which includes assisted delivery and medical abortion. There is considerable variation in the provision of these specific maternal health services across provinces. Only 15% of facilities in Province 4 provide assisted delivery, while up to 42% of facilities in Province 2 show a capacity to assist in delivery.

Similarly, a mere 13% of facilities in Province 7 provide medical abortion compared with 42% of facilities in Province 2. On average, 90% of facilities reported to have skilled providers available on-site or on-call 24 hours per day, with or without an observed duty schedule. Finally, the proportion of facilities providing comprehensive abortion care (CAC) ranged from 45% (Province 2) to 75% (Province 6), with a national average of 59%.

**Table 52 Availability of normal vaginal delivery and other maternal health services**

Percentages of all facilities that offer normal vaginal delivery and caesarean delivery services, and within these the percentages offering specific maternal health services (assisted delivery and medical abortion) 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. The data are presented by facility type and province.

Percentages of facilities offering normal vaginal delivery services that offer/have:

Background characteristics	Percentages of facilities offering:		Number of facilities	Percentages of facilities offering:		Number of facilities excluding PHCCs, HPs and UHCs	Assisted delivery	Medical abortion	Provider of delivery care available on-site or on-call 24 hours/day, with or without observed duty schedule		Number of facilities offering normal vaginal delivery services	Percentages of facilities offering normal vaginal delivery services that offer/have:		Number of facilities excluding HPs and UHCs
	Normal vaginal delivery service	Caesarean delivery		Caesarean delivery	Medical abortion				Provider of delivery care available on-site or on-call 24 hours/day, with or without observed duty schedule	Provider of delivery care available on-site or on-call 24 hours/day, with or without observed duty schedule		Comprehensive abortion care (CAC)		
<b>Facility type</b>														
Zonal and above hospitals	84.0		5	87.8		5	100.0	81.5	100.0		5	86.1		5
District level hospitals	100.0		16	53.9		16	81.6	72.4	100.0		16	85.5		16
Private hospitals	64.2		70	49.5		70	51.8	55.3	91.9		45	62.9		45
PHCCs	96.1		42	-		0	38.8	54.5	95.5		41	40.9		41
HPs	45.3		775	-		0	17.6	16.1	90.5		351	-		0
UHCs	2.6		32	-		0	0.0	0.0	100.0		1	-		0
<b>Province</b>														
Province 1	47.4		164	42.2		16	23.5	28.7	92.7		78	51.6		19
Province 2	23.1		171	65.1		12	41.8	41.6	96.9		39	44.6		20
Province 3	44.6		185	63.0		32	25.2	29.6	82.8		82	63.7		30
Province 4	55.3		119	41.0		10	14.6	30.4	94.1		66	64.1		11
Province 5	45.7		138	38.3		12	31.3	29.3	95.2		63	64.5		13
Province 6	83.3		74	47.6		4	30.5	13.6	96.0		62	75.0		6
Province 7	75.4		89	48.1		6	21.5	12.7	87.6		67	63.2		8
National average	48.7		940	52.5		91	25.8	25.9	91.5		457	58.7		106

Note: Stand-alone HTC sites, Sukra Raj, Bir and Kantu children hospital are excluded in this and all the tables of this chapter.

Note: The total number of facilities includes 1 UHC that offers normal vaginal delivery services.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 7.2 Service Readiness

### 7.2.1 Service guidelines, trained staff, and equipment for delivery services

Among facilities offering normal vaginal delivery services, the percentage of facilities having guidelines in place on delivery care (e.g. Nepal Medical Standard Volume III or Reproductive Health Clinical Guidelines) ranged from 10% in Province 3 to 42% in Province 5, with a national average of 22%. The percentage of facilities with at least one staff member who reported to have received the skilled birth attendant training (SBA) during the 24 months preceding the survey ranged from 15% in Province 4 to 52% in Province 2, with a national average of 35%. A relatively high percentage of facilities have equipment available to

provide quality vaginal delivery services. On average, over 90% have gloves, delivery beds available, and between 60% and 85% have emergency transport, examination lights, suction apparatus, neonatal bags and masks, and partographs available. Less than 21% of facilities provide manual vacuum extractors or aspiration kits or MVA kits. Facilities in Province 6 had the lowest reported amount of equipment available, while facilities in Provinces 4 and 5 reported the highest availability of equipment (Table 52).

**Table 53 Guidelines, trained staff, and equipment for delivery services**

Background characteristics	Guidelines on delivery care <sup>1</sup>	Staff trained in delivery care <sup>2</sup>	Emergency transport <sup>3</sup>	Examination light <sup>4</sup>	Delivery pack <sup>5</sup>	Equipment					Number of facilities offering normal vaginal delivery services		
						Suction apparatus (mucus extractor)	Manual vacuum extractor	Vacuum aspiration kit or MVA kit <sup>6</sup>	Neonatal bag and mask	Partograph <sup>7</sup>		Gloves <sup>8</sup>	Delivery bed
<b>Facility type</b>													
Zonal and above hospitals	27.2	36.2	95.5	100.0	100.0	95.5	95.5	81.5	100.0	95.5	100.0	100.0	5
District level hospitals	25.0	60.5	93.4	88.2	100.0	96.1	89.5	81.6	98.7	97.4	100.0	100.0	16
Private hospitals	0.5	14.2	96.2	83.4	90.6	90.5	47.6	51.2	79.8	60.5	91.2	94.1	45
PHCCs	21.7	52.6	74.8	68.2	97.0	75.3	37.8	47.4	93.4	85.2	94.5	98.5	41
HPs	24.4	34.7	54.6	55.4	91.7	54.8	11.1	8.3	81.1	80.9	92.3	96.2	351
UHCs	0.0	0.0	100.0	0.0	100.0	75.0	75.0	0.0	75.0	100.0	25.0	100.0	1
<b>Province</b>													
Province 1	19.5	35.9	55.1	60.8	91.4	63.0	28.2	18.4	80.9	68.3	96.0	94.9	78
Province 2	20.4	51.6	81.7	65.3	95.2	87.8	28.8	35.0	93.6	72.4	96.5	96.2	39
Province 3	9.5	38.0	81.1	68.2	91.1	76.9	22.0	25.1	89.6	80.2	91.1	95.0	82
Province 4	25.9	14.8	67.4	73.7	85.4	77.0	13.4	10.4	72.7	93.8	95.7	95.8	66
Province 5	41.6	34.5	64.1	63.5	100.0	52.0	16.9	17.7	88.2	91.1	95.4	99.7	63
Province 6	20.4	31.7	37.7	38.1	91.5	31.5	14.1	10.8	71.5	82.7	85.9	93.3	62
Province 7	19.2	44.8	51.7	54.2	94.4	50.0	22.6	21.3	85.7	71.6	88.3	100.0	67
National average	21.8	35.1	62.3	60.7	92.4	62.0	20.7	19.2	82.8	80.0	92.5	96.3	457

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

<sup>1</sup> Nepal Medical Standards (NMS) volume III or Reproductive Health (RH) clinical guideline.

<sup>2</sup> At least one interviewed provider of delivery services at the facility reported receiving the skilled birth attendant (SBA) training, the advanced skilled birth attendant (ASBA) training, the maternal and newborn health update, training on routine care during labor and normal vaginal delivery, or training in active management of third stage of labor (AMTSL) during the 24 months preceding the survey. The training must have involved structured sessions and does not include individual instruction that a provider might have received during routine supervision.

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

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

<sup>5</sup> Either the facility had a sterile delivery pack available at the delivery site or 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 and 4 piece wrapper (update specs).

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

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

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

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

### **7.2.2 Medicines and commodities for delivery and newborn care**

Table 53 presents the proportion of facilities with essential medicines and commodities for delivery care, essential medicines for newborns, and priority medicines for mothers, among facilities that offer normal vaginal delivery services. The proportion of facilities with all essential medicines for delivery (e.g. injectable uterotonic, injectable antibiotic, skin antiseptic, and intravenous fluids with infusion set) ranged from 8% in Province 4 to 18% in Province 5, with a national average of 12%. The proportion of facilities with all essential medicines for newborns (tetracycline eye ointment, 4% chlorhexidine gel, injectable gentamicin, ceftriaxone powder for injection, and amoxicillin suspension or dispersible pediatric dosed tablet) was less than 2% across all provinces, with a national average of 0.7%. The percentage of facilities with all priority medicines for mothers available is fairly low as well, ranging from 2% in Province 1 to 7% in Province 3, with a national average of 3%. Province 6 has the lowest reported average availability of medicines, while facilities in Province 3 showed the highest availability of these supplies. A comparison of the availability of medicines and commodities for delivery by public and private management of the facility shows that private facilities have significantly higher availabilities of these supplies. Similarly, private facilities on average have higher availabilities across all medicines for newborns and mothers, with few exceptions.

**Table 54 Medicines and commodities for delivery and newborn care**

The percentages of facilities offering normal vaginal delivery services with essential medicines and commodities for delivery care, essential medicines for newborns, and priority medicines for mothers observed to be available on the day of the survey, by managing authority and province.

Medicines	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
<b>Essential medicines for delivery<sup>1</sup></b>										
Injectable uterotonic (oxytocin) <sup>2</sup>	88.7	83.2	83.8	92.2	82.5	89.7	95.5	78.7	98.0	88.2
Injectable antibiotic <sup>3</sup>	38.0	67.9	41.6	62.3	42.6	30.4	48.6	39.0	30.2	40.9
Skin antiseptic	91.7	87.9	87.5	96.2	94.7	91.4	93.9	83.7	93.4	91.4
Intravenous fluids with infusion set <sup>4</sup>	91.9	76.1	88.0	89.8	86.8	93.6	92.9	83.2	98.6	90.3
All essential medicines for delivery	8.7	42.9	8.9	12.0	14.7	7.8	18.3	10.0	12.3	12.0
<b>Essential medicines for newborns</b>										
Tetracycline eye ointment <sup>1</sup>	42.6	10.4	25.1	24.5	40.0	53.4	48.2	45.2	37.0	39.5
4% chlorhexidine gel <sup>1</sup>	61.7	24.1	61.9	52.6	60.4	41.0	75.7	37.6	72.3	58.0
Injectable gentamicin <sup>2</sup>	76.1	62.6	69.6	66.3	57.3	70.9	79.4	94.3	88.5	74.8
Ceftriaxone powder for injection	6.3	64.5	11.4	17.7	22.6	11.4	11.5	2.7	6.1	12.0
Amoxicillin suspension or dispersible pediatric dosed tablet	22.2	57.9	20.7	37.5	46.9	23.0	14.9	13.6	22.2	25.7
All essential medicines for newborns	0.5	2.1	0.3	0.0	1.5	0.3	0.9	0.7	0.9	0.7
<b>Priority medicines for mothers<sup>5</sup></b>										
Sodium chloride injectable solution	58.9	73.6	52.8	58.3	75.8	89.7	53.8	45.6	42.6	60.4
Injectable Calcium gluconate	18.4	55.2	24.4	14.6	27.4	12.9	28.7	22.2	19.5	22.0
Ampicillin powder for injection	6.8	38.0	7.6	12.8	12.9	7.9	7.5	10.1	10.9	9.9
Injectable metronidazole	26.5	65.4	23.5	25.1	49.3	27.6	25.8	26.5	28.5	30.3
Misoprostol capsules or tablets	28.3	43.1	35.5	42.2	23.2	39.4	32.5	17.3	23.2	29.7
Azithromycin capsules or tablets or oral liquid	13.5	68.3	10.1	22.7	29.6	17.5	19.3	16.0	17.2	18.9
Cefixime capsules or tablets	10.0	68.0	10.4	18.7	32.2	16.3	17.6	4.3	7.7	15.7
Injectable betamethasone or dexamethasone	30.0	63.2	33.7	38.8	36.5	35.7	36.7	20.1	32.0	33.3
All priority medicines for mothers	0.7	24.5	1.9	3.4	6.6	5.0	1.6	0.3	1.2	3.0
Number of facilities offering normal vaginal delivery services	413	45	78	39	82	66	63	62	67	457

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

Note: The total number of facilities includes 1 UHC that offers normal vaginal delivery services.

<sup>1</sup> All essential medicines for delivery, antibiotic eye ointment, and 7.1% chlorhexidine were assessed and must be available at the service delivery site.

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

<sup>3</sup> Injectable antibiotic, e.g., ceftriaxone and ampicillin.

<sup>4</sup> Any intravenous fluid with infusion sets.

<sup>5</sup> The priority medicines for mothers are defined by WHO; the list is published at <http://www.who.int/medicines/publications/A4prioritymedicines.pdf>.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

### 7.3 Signal Functions for Emergency Obstetric and Newborn Care (EmONC)

Table 54 shows the percentage of facilities offering normal vaginal delivery services that reported applying or carrying out EmONC services at least once in the three months preceding the survey. Signal functions under EmONC are parenteral administration of antibiotics, parenteral administration of oxytocin or other uterotonic, parenteral administration of anticonvulsant for hypertensive disorders of pregnancy, assisted vaginal delivery, manual removal of placenta, removal of retained products of conception, and neonatal resuscitation. The proportion of facilities that reported applying or carrying out each of these seven signal functions for EmONC ranged from 1% (Province 4) to 12% (Province 2), with a national average of 4%. More than 85% of facilities across all provinces administer parental



oxytocin services, while only 10% of facilities across all provinces provide parental anticonvulsant services. The other signal functions are carried out by 16% to 41% of facilities across all provinces. The proportion of facilities that in addition to the seven signal functions have carried out a caesarean delivery and have done a blood transfusion in an obstetric context at least once in the three months preceding the survey ranged from 6% (Province 4) to 17% (Province 5), with a national average of 12%.

**Table 55 Signal functions for emergency obstetric and neonatal care (EmONC) and functional basic EmONC and comprehensive EmONC facilities**

Percentages of facilities offering normal vaginal delivery services that reported applying or carrying out the signal functions for basic emergency obstetric and neonatal care at least once in the 3 months preceding the survey, and percentages applying or carrying out basic emergency obstetric and neonatal care (BEmONC) and applying or carrying out comprehensive emergency obstetric and neonatal care (CEmONC) facilities by facility type and province.

Background characteristics	Percentages of facilities that carried out:							Number of facilities offering normal vaginal delivery services	Percentages of facilities that carried out:			Number of hospitals and PHCCs offering normal vaginal delivery services	
	Parenteral antibiotics	Parenteral oxytocin	Parenteral anti-convulsant	Assisted vaginal delivery (AVD)	Manual removal of placenta	Removal of retained products of conception (MVA)	Neonatal resuscitation		BEmONC <sup>1</sup>	Blood transfusion	Caesarean delivery		CEmONC <sup>2</sup>
<b>Facility type</b>													
Zonal and above hospitals	90.9	100.0	77.0	100.0	90.9	95.1	100.0	67.9	5	95.5	100.0	67.9	5
District level hospitals	88.2	100.0	40.8	59.2	78.9	80.3	80.3	22.4	16	47.4	50.0	18.4	16
Private hospitals	72.3	79.0	31.2	34.2	53.6	43.9	48.0	15.7	45	50.0	59.0	13.3	45
PHCCs	51.4	93.4	9.1	19.2	52.0	43.9	53.5	3.0	41	1.0	1.0	0.5	41
HPs	32.8	84.9	5.1	10.4	38.0	27.3	30.7	1.3	351	-	-	-	0
UHCs	0.0	100.0	0.0	0.0	100.0	75.0	0.0	0.0	1	-	-	-	0
<b>Province</b>													
Province 1	35.6	83.1	7.9	11.4	51.3	40.5	42.3	2.7	78	23.6	29.1	8.8	19
Province 2	64.6	95.7	27.0	35.0	54.3	44.3	54.0	12.3	39	30.8	36.7	10.8	20
Province 3	40.2	77.3	9.9	12.9	31.6	25.6	27.9	5.2	82	42.5	47.7	13.6	30
Province 4	35.5	76.0	4.1	8.7	32.4	15.5	19.1	0.9	66	30.0	33.7	5.6	11
Province 5	57.8	93.8	15.8	22.4	57.1	46.0	46.1	5.5	63	30.4	33.9	17.3	13
Province 6	28.6	85.3	5.5	16.5	34.4	23.9	43.5	4.5	62	28.6	28.6	7.1	6
Province 7	33.5	96.2	6.8	15.3	44.7	39.8	33.5	1.8	67	31.6	31.6	13.2	8
National average	40.7	85.8	10.0	16.1	42.8	33.0	36.8	4.2	457	32.7	37.0	11.5	106

<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 (AVD), 5) manual removal of placenta, 6) removal of retained products of conception (MVA), and 7) neonatal resuscitation.

<sup>2</sup> Facility reported that it provides delivery and newborn care services, and that 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 (AVD), 5) manual removal of placenta, 6) removal of retained products of conception (MVA), and 7) neonatal resuscitation.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 7.4 Newborn Care Practices

Table 55 presents the proportion of facilities providing normal vaginal delivery services that report that a number of newborn care practices are a routine component of their newborn care services. Newborn care practices, such as delivery to the abdomen (skin-to-skin), drying and wrapping to keep the newborns warm, kangaroo mother care, initiation of breastfeeding within the first hour, routine complete examination of newborns before discharge, weighing the newborn immediately upon delivery, were reported to be a routine component of newborn care services by more than 80% facilities in all of the seven provinces. In contrast, the proportion of facilities reporting that BCG vaccine was given to the newborn prior to discharge, and that they administered and applied vitamin K and tetracycline eye ointment to newborns was between 10% and 13%. Practices such as applying chlorhexidine ointments

and suctioning the newborn with catheter and suction bulb were found to be a routine component of newborn care in 42% to 64% of the facilities.

**Table 56 Newborn care practices**

Among facilities offering normal vaginal delivery services, the percentages reporting the indicated newborn care practices as a routine component of newborn care, by managing authority and province.

New-born care practices	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
Delivery to the abdomen (skin-to-skin)	91.3	84.4	96.4	84.9	89.0	98.1	93.3	75.5	93.5	90.7
Drying and wrapping newborns to keep warm	97.4	97.0	97.2	100.0	100.0	97.9	100.0	86.1	100.0	97.3
Kangaroo mother care	92.5	81.6	88.8	97.0	84.6	93.3	97.4	90.5	92.9	91.4
Initiation of breastfeeding within the first hour	99.1	96.9	98.5	100.0	99.7	99.7	100.0	94.1	100.0	98.9
Routine complete (head-to-toe) examination of newborns before discharge	94.4	94.0	92.1	96.2	98.2	100.0	92.1	84.8	96.5	94.3
Applying chlorhexidine ointment to umbilical cord stump	67.7	25.4	77.1	66.0	59.1	52.2	76.0	35.3	77.2	63.6
Suctioning the newborn with catheter	39.8	76.7	46.8	71.0	59.0	43.5	42.8	18.6	27.3	43.4
Suctioning the newborn with suction bulb	41.7	40.5	43.3	57.2	41.2	34.8	42.5	31.1	46.2	41.6
Weighing the newborn immediately upon delivery	95.6	95.3	86.1	97.6	98.2	97.9	100.0	92.2	98.6	95.5
Administration of vitamin K to new-born	3.3	70.4	7.9	16.5	20.8	5.7	7.6	3.0	7.2	9.8
Applying tetracycline eye ointment to both eyes	14.0	2.9	10.9	12.8	11.1	11.0	7.6	15.9	21.9	12.9
Giving the new-born BCG prior to discharge	10.7	22.0	13.9	9.5	20.8	7.0	17.1	7.5	3.5	11.8
Number of facilities offering normal vaginal delivery services	413	45	78	39	82	66	63	62	67	457

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 7.5 Supportive Management and Training of Service Providers

### 7.5.1 General training and supervision

Table 56 describes the proportion of delivery or newborn care service providers who reported receiving training related to their work and receiving personal supervision during specified time periods. The proportion of providers who received training related to delivery and/or newborn care during the 24 months preceding the survey ranged from 12% (Province 4) to 40% (Province 6), with a national average of 24%.

Across all provinces, between 61% and 83% of providers of normal vaginal delivery or newborn care reported that they received personal supervision during the six months preceding the survey, with a national average of 73%.

**Table 57 Supportive management for providers of delivery care**

The percentages of interviewed providers of normal vaginal delivery or newborn care services who reported receiving training related to their work and personal supervision during the specified time periods, by facility type and province.

Background characteristics	Percentages of interviewed providers who received			Number of interviewed providers of normal delivery or newborn care services
	Training related to delivery and/or newborn care during the 24 months preceding the survey <sup>1</sup>	Training related to delivery and/or newborn care <sup>1</sup>	Personal supervision during the 6 months preceding the survey <sup>2</sup>	
<b>Facility type</b>				
Zonal and above hospitals	16.9	38.0	63.3	58
District level hospitals	26.5	52.0	64.0	141
Private hospitals	6.9	20.6	57.6	325
PHCCs	28.5	58.3	76.9	205
HPs	29.2	56.2	78.7	1,026
<b>Province</b>				
Province 1	25.0	47.4	73.1	299
Province 2	21.5	45.8	69.4	189
Province 3	21.5	44.3	61.1	384
Province 4	12.4	43.1	83.2	214
Province 5	27.3	55.7	82.0	232
Province 6	39.8	60.4	69.3	173
Province 7	26.8	50.8	78.4	267
National average	24.4	48.9	72.9	1,757

<sup>1</sup> Provider reported receiving the skilled birth attendant (SBA) training, the advanced skilled birth attendant (ASBA) training, the maternal and newborn health update, training on routine care during labor and normal vaginal delivery, training in active management of third stage of labor (AMTSL), or any training related to newborn care during the 24 months preceding the survey. The training must have involved structured sessions and does not include individual instruction that a provider might have received during routine supervision.

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

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 7.5.2 In-service training

### Training for providers of normal vaginal delivery services: delivery care

Table 57 shows the proportion of providers of normal vaginal delivery or newborn care services who reported receiving in-service training on specific topics related to delivery care during a specified time period preceding the survey. The following in-service trainings were reported being received during the past 24 months by only 3% to 5% of providers nationwide: Advanced Skilled Birth Attendant (ASBA), MNH update/emergency obstetric care/lifesaving skills, and comprehensive abortion care (CAC). This is significantly lower than the average of other in-service trainings over the past 24 months, such as skilled birth attendant (SBA) training, the active management of third stage of labor (AMTSL), route care during labor and delivery, and postabortion Care (PAC), for which the national averages are between 10 and 12%. Providers in Province 4 reported the lowest number of in-service trainings received over the past 24 months, while providers in Province 1 received the highest number of in-service trainings over the past 24 months. Considering the difference between in-service trainings received over the past 24 months and in-service trainings received at any time, the differences are largest for Province 5, and smallest for Province 2.

**Table 58 Training for providers of normal vaginal delivery services: delivery care**

Background characteristics	Percentages of interviewed providers of normal delivery or newborn care services who reported receiving in-service training on specific topics related to delivery care during the 24 months preceding the survey, by facility type and province.										Number of interviewed providers of normal newborn care services						
	Percentages of interviewed providers of normal delivery or newborn care services who report receiving in-service training in:					Percentages of interviewed providers of normal newborn care services who report receiving in-service training in:											
	Skilled birth attendant (SBA) training	Advanced skilled birth attendant (ASBA) training	Routine care during labor and delivery	Active management of third stage of labor (AMTSL)	MNH update/emergency obstetric care/lifesaving skills	Post-abortion care (PAC)	Comprehensive abortion care (CAC)	During the past 24 months	At anytime	During the past 24 months		At anytime					
<b>Facility type</b>	During the past 24 months	During the past 24 months	During the past 24 months	During the past 24 months	During the past 24 months	During the past 24 months	During the past 24 months	During the past 24 months	During the past 24 months	During the past 24 months	During the past 24 months	At anytime	At anytime				
Zonal and above hospitals	7.4	26.8	4.8	18.7	7.1	23.2	7.1	7.1	24.8	5.8	20.4	10.6	38.9	4.2	17.2	58	
District level hospitals	15.5	41.2	6.7	15.3	12.0	29.5	13.8	2.6	33.1	9.8	23.6	17.5	43.9	6.3	17.3	141	
Private hospitals	2.7	9.7	2.3	7.5	3.3	9.7	2.6	9.9	9.9	3.5	7.8	3.8	18.2	2.3	8.6	325	
PHCCs	13.8	39.2	5.4	14.0	10.7	28.6	11.5	30.4	30.4	11.0	22.9	14.3	39.3	2.6	11.1	205	
HPs	13.2	33.1	5.3	11.5	12.9	28.7	14.0	28.8	28.8	10.6	18.2	11.1	23.0	2.6	7.4	1,026	
<b>Province</b>																	
Province 1	10.9	32.4	4.7	8.2	12.0	30.8	12.3	30.1	30.1	10.7	24.5	20.1	33.4	3.4	8.0	299	
Province 2	14.5	29.5	2.9	7.0	7.6	15.6	10.2	17.5	17.5	10.6	14.5	18.3	29.5	1.4	6.3	189	
Province 3	10.6	25.4	2.6	9.5	10.8	21.5	10.7	23.4	23.4	6.2	12.8	4.0	24.4	1.0	9.8	384	
Province 4	7.7	31.8	2.9	7.3	7.4	20.7	7.2	22.1	22.1	6.0	12.3	7.3	23.3	1.3	7.5	214	
Province 5	13.8	36.7	6.0	17.2	11.1	29.1	10.7	28.0	28.0	8.5	19.3	13.2	32.0	6.2	12.4	232	
Province 6	9.9	25.8	8.1	15.7	13.0	32.5	14.0	29.7	29.7	13.1	20.2	7.4	17.3	3.8	8.1	173	
Province 7	12.1	29.2	7.9	17.2	11.2	25.4	14.0	28.0	28.0	11.1	18.5	6.5	21.4	3.9	10.8	267	
National average	11.3	29.9	4.8	11.5	10.6	25.0	11.3	25.7	25.7	9.1	17.3	10.6	26.2	2.9	9.2	1,757	

Note: Training here 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.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

### Training for providers of newborn care

Table 58 describes the proportion of providers of normal vaginal delivery or newborn care services who reported receiving in-service training on specific topics related to newborn care during a specified period preceding the survey. We found that the in-service training that was received least over the past 24 months was newborn infection management training, with only 8% of providers nationwide reporting having received this training. The other trainings were received by 11-13% of the providers nationwide. On average, providers in Province 4 show the lowest percentage of received trainings over the past 24 months, while providers in Province 5 have received the largest percentage of trainings. Considering the difference between in-service trainings received over the past 24 months and in-service trainings received at any time, these differences are largest for Province 5 and smallest for Province 4.

**Table 59 Training for providers of normal vaginal delivery services: immediate newborn care**

Background characteristics	Percentages of interviewed providers of normal delivery or newborn care services who report receiving in-service training in:												Number of interviewed providers of normal newborn delivery or care services	
	Neonatal Resuscitation using bag and mask		Early and exclusive breastfeeding		Newborn infection management		Thermal care		Sterile cord cutting and appropriate cord care		Kangaroo mother care for low birth weight babies			
	During the past 24 months	At anytime	During the past 24 months	At anytime	During the past 24 months	At anytime	During the past 24 months	At anytime	During the past 24 months	At anytime	During the past 24 months	At anytime		
<b>Facility type</b>														
Zonal and above hospitals	6.7	23.0	5.1	18.3	5.8	20.3	5.2	18.2	4.4	15.5	6.6	18.8	58	
District level hospitals	12.6	29.7	12.7	26.3	8.2	20.3	11.3	24.2	12.7	25.5	12.6	28.1	141	
Private hospitals	3.1	11.2	2.2	9.4	0.6	4.9	1.3	6.6	1.8	7.6	1.2	7.9	325	
PHCCs	14.0	33.3	14.2	32.5	10.7	26.9	12.8	27.8	12.5	29.2	13.4	32.1	205	
HPs	15.3	33.9	16.8	34.1	9.7	25.4	14.5	29.6	14.6	30.9	14.6	34.3	1,026	
<b>Province</b>														
Province 1	12.5	29.0	14.2	30.6	9.2	21.3	13.6	28.5	13.3	27.7	13.3	30.8	299	
Province 2	8.0	23.1	7.7	16.9	3.0	11.3	6.8	14.6	8.0	19.1	6.3	18.2	189	
Province 3	11.3	26.3	10.3	26.2	4.1	15.2	9.3	22.2	7.3	20.0	8.4	23.2	384	
Province 4	6.4	17.0	6.9	17.8	3.6	13.7	6.3	15.5	5.7	16.5	7.1	18.0	214	
Province 5	13.0	35.8	14.2	34.1	10.3	29.6	11.1	28.5	13.6	34.1	14.1	34.9	232	
Province 6	24.4	37.4	30.7	41.7	21.6	35.1	23.4	32.1	23.2	34.0	22.5	40.8	173	
Province 7	13.5	35.0	12.3	30.5	8.0	26.3	10.9	27.7	13.0	29.5	12.3	33.5	267	
National average	12.4	28.9	13.1	28.2	7.9	21.2	11.2	24.3	11.5	25.4	11.6	28.2	1,757	

Note: Training here 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.  
Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 8 HIV/AIDS AND SEXUALLY TRANSMITTED INFECTIONS

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### Key Findings

- *Nationwide, 6% of facilities have an HIV testing system, either in the facility or through an external testing site, with on average only 3% of facilities in Province 1 and 6, and nearly 9% of facilities in Province 3.*
- *Among the facilities with an HIV testing system, the proportion of facilities with HIV testing capacity at the facility ranged from 73% (Province 2) to 94% (Province 5).*

This chapter summarizes the key findings on availability of services, selected components of service readiness (training), and STI services. This information was collected through the facility inventory questionnaire and the health provider questionnaire.

### 8.1 HIV Testing and Counselling

#### 8.1.1 Availability of services

Table 59 shows the proportion and number of facilities that reported having an HIV testing system in place and the capacity to provide quality HIV testing services, including counselling services and in-service training. We found that 6% of facilities nationwide have an HIV testing system, either in the facility or through an external testing site, with on average only 3% of facilities in Province 1 and 6, and nearly 9% of facilities in Province 3. Among the facilities with an HIV testing system, the proportion with HIV testing capacity at the facility ranged from 73% (Province 2) to 94% (Province 5), with a national average of 81%. The proportion of facilities that have national HIV testing and counselling guidelines ranged from 26% (Province 2 and 3) to 55% (Province 1), with a national average of 34%. The proportion of providers who reported receiving at least one in-service training on some aspects of HIV testing and counselling in the facility ranged from 25% in Province 3 to 54% in Province 5, with a national average of 39%. Visual and auditory privacy is important for clients seeking services for HIV/AIDS and STIs, and privacy was found to be available in more than 88% of facilities in each of the seven provinces. Nationwide, condoms are available in 62% of facilities.

**Table 60 Availability of HIV testing and counselling services**

Percentages of all facilities with HIV testing systems 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 counselling services, by facility type and province.

Background characteristics	Percentages of all facilities with HIV testing system <sup>1</sup>	Number of facilities	Percentages of facilities with an HIV testing system that have:							Number of facilities having HIV testing system
			HIV testing capacity <sup>2</sup>	National HIV testing and counselling guidelines	Trained provider <sup>3</sup>	Ever-trained provider <sup>4</sup>	Visual and auditory privacy <sup>5</sup>	Condoms <sup>6</sup>	All items <sup>7</sup>	
<b>Facility type</b>										
Zonal and above hospitals	86.3	6	87.3	52.2	48.3	91.8	95.7	76.0	7.9	5
District level hospitals	56.6	16	100.0	41.9	58.1	95.3	90.7	74.4	20.9	9
Private hospitals	25.0	70	49.7	6.7	10.4	28.2	98.7	14.0	0.0	17
PHCCs	11.2	42	100.0	13.0	43.5	78.3	87.0	95.7	8.7	5
HPs	0.7	775	82.5	18.1	19.9	70.3	100.0	80.1	0.0	5
UHCs	0.0	32	-	-	-	-	-	-	-	0
Stand-alone HTC	68.8	23	96.0	65.9	61.1	89.4	98.7	88.3	31.6	16
<b>Province</b>										
Province 1	3.1	166	87.0	55.3	45.5	91.9	100.0	71.5	8.1	5
Province 2	6.5	174	72.9	26.4	30.2	52.8	98.2	51.9	12.5	11
Province 3	8.7	192	76.5	25.9	25.0	46.5	93.6	47.3	11.2	17
Province 4	5.8	122	76.6	39.8	49.7	76.6	100.0	63.2	24.6	7
Province 5	6.4	144	94.0	38.0	53.8	95.5	97.8	77.5	8.1	9
Province 6	3.1	74	90.9	36.4	45.5	81.8	100.0	54.5	27.3	2
Province 7	5.8	92	83.3	40.6	50.6	92.2	88.3	96.1	15.6	5
National average	5.9	963	80.8	34.1	38.8	69.2	96.3	62.1	13.4	57

Note: The guidelines and trained staff indicators presented in this table correspond to the staff and training domain for assessing readiness to provide HIV testing and testing services within the health facility assessment methodology proposed by WHO and USAID (2012). Similarly, the visual and auditory privacy items comprise the equipment domain, the HIV testing capacity comprises the diagnostic domain, and condoms comprise the medicines and commodities domain for assessing readiness to provide HIV testing and counselling services within the WHO-USAID framework.

<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 at the facility and had at least one unexpired Determine, at least one unexpired Uni-Gold and at least one unexpired Stat Pak HIV rapid diagnostic test kit available somewhere in the facility on the day of the survey, or else facility had ELISA testing capacity or other HIV testing capacity observed in the facility on the day of the survey.

<sup>3</sup> At least one interviewed provider of HIV testing and counselling services in the facility reported receiving in-service training in some aspect of HIV/AIDS testing and counselling 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> At least one interviewed provider of HIV testing and counselling services in the facility reported ever receiving in-service training in some aspect of HIV/AIDS testing and counselling. The training must have involved structured sessions; it does not include individual instruction that a provider might have received during routine supervision.

<sup>5</sup> Private room or screened-off space available in HIV testing and counselling 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>6</sup> Condoms available at the HIV testing and counselling site on the day of the survey.

<sup>7</sup> Facility had all of the following items available on the day of the survey: HIV testing capacity, national HIV testing and counselling guideline, at least one interviewed provider trained in the past 24 months in HIV testing and counselling, visual and auditory privacy and condoms available at the HIV testing site.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 8.1.2 Supportive management for providers of HIV testing services

The proportion of HIV testing service providers who received training related to HIV testing and counselling over the 24 months preceding the survey is 13% on average nationwide, ranging from 9% (Province 3) to 20% (Province 5). When providers were asked whether they received this training at any time, nearly 37% of the providers confirmed that they did. The proportion of providers who reported receiving personal supervision during the past six months ranged from 62% (Province 3) to 84% (Province 2), with a national average of 72%. When providers were asked if they received both training related to HIV testing and counselling, and received personal supervision, the national average reporting positively drops to 11% (Table 60).



**Table 61 Supportive management for providers of HIV testing services**

Percentages of HIV testing service providers who reported receiving training related to their work and personal supervision during the specified time periods, by facility type and province.

Background characteristics	Percentages of interviewed providers who received:				Number of interviewed providers of HIV testing and counselling services
	Training related to HIV testing and counselling during the 24 months preceding the survey <sup>1</sup>	Training related to HIV testing and counselling at anytime	Personal supervision during the 6 months preceding the survey <sup>2</sup>	Training related to HIV testing and counselling during the 24 months and personal supervision during the 6 months preceding the survey	
<b>Facility type</b>					
Zonal and above hospitals	7.6	38.7	71.3	5.2	85
District level hospitals	14.8	39.5	68.9	10.6	99
Private hospitals	3.2	17.2	59.8	2.3	152
PHCCs	11.2	33.9	74.7	8.2	31
HPs	10.5	37.5	91.8	10.5	26
Stand-alone HTC	42.4	77.0	94.7	40.7	64
<b>Province</b>					
Province 1	14.1	35.0	72.1	7.2	38
Province 2	13.2	30.9	84.0	11.3	68
Province 3	8.7	29.2	62.1	7.3	158
Province 4	12.9	34.2	68.7	12.3	55
Province 5	19.6	51.0	80.7	17.4	75
Province 6	17.3	38.0	71.7	15.7	16
Province 7	14.0	51.7	74.1	11.9	46
National average	13.0	36.7	71.6	10.9	456

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

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

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 8.2 Sexually Transmitted Infections

### 8.2.1 Service readiness

#### Guidelines, trained staff, and Items for sexually transmitted infection services

On average, as Table 61 shows, 74% of facilities nationwide offer STI services, including the ability to diagnose STIs, prescribe treatment of STIs, or both. The percentage of facilities that provide national STI guidelines and train staff on STI diagnosis, however, is only 8.1% and 8.4% respectively. Similarly, the percentage of facilities that have the capacity to provide syphilis rapid diagnostic testing is relatively low, at only 16% nationwide. Regarding the availability of medicines and commodities that can support the provision of quality STI services, over 90% of facilities in each of the seven provinces have male condoms and metronidazole. The availability of other medicines such as injectable ceftriaxone (6%, Province 6 to 19%, Province 3), azithromycin tablets (9%, Province 1 to 28%, Province 3), cefixime tablets (7%, Province 2 to 29%, Province 3), doxycycline tablets (19%, Province 2 to 52%, Province 3), and fluconazole tablets or ointment (9%, Province 1 and 6 to 28%, Province 3) was considerably lower across all provinces.

**Table 62 Guidelines, trained staff, and items for sexually transmitted infection services**

Among all facilities, the percentages offering services for sexually transmitted infections (STIs) and, among facilities offering STI services, the percentages with indicated items to support the provision of quality STI services, by facility type and province

Background characteristics	Percentages of facilities offering STI services <sup>1</sup>		Percentages of facilities offering STI services that have:							Medicines and commodities					Number of facilities offering STI services
	of facilities offering STI services <sup>1</sup>	Number of facilities	National STI guidelines	Trained staff <sup>2</sup>		Syphilis rapid diagnostic test capacity <sup>3</sup>	Male condoms	Metronidazole	Injectable ceftriaxone	Azithromycin tablets	Cefixime tablets	Doxycycline tablets	Fluconazole tablets or ointment		
				Trained staff <sup>2</sup>	Syphilis rapid diagnostic test capacity <sup>3</sup>										
<b>Facility type</b>															
Zonal and above hospitals	100.0	6	17.1	20.5	82.2	100.0	100.0	93.2	76.1	76.1	52.2	59.0	6		
District level hospitals	98.7	16	16.0	25.3	81.3	100.0	100.0	100.0	56.0	70.7	76.0	61.3	15		
Private hospitals	93.0	70	2.0	4.0	82.2	61.9	99.5	72.5	66.9	68.5	65.2	67.0	65		
PHCCs	97.6	42	11.9	19.4	52.7	99.5	99.5	98.5	13.9	24.8	44.2	26.8	41		
HPs	70.7	775	6.5	6.3	1.8	99.6	99.6	98.7	1.4	8.7	28.1	5.4	548		
UHCs	51.0	32	1.3	12.5	0.0	100.0	100.0	96.2	0.0	33.7	49.4	7.6	16		
Stand-alone HTCs	83.3	23	63.5	38.4	54.8	100.0	100.0	69.9	39.8	70.8	60.0	67.0	19		
<b>Province</b>															
Province 1	71.5	166	5.1	8.6	14.4	94.9	94.9	94.4	9.3	9.2	11.3	8.5	118		
Province 2	67.4	174	6.3	9.1	15.8	96.2	96.2	96.5	6.5	14.3	7.3	10.0	117		
Province 3	82.5	192	10.0	7.5	20.2	93.5	93.5	94.7	19.0	27.5	28.8	27.5	158		
Province 4	74.2	122	4.4	3.9	16.3	99.3	99.3	98.8	11.1	18.9	15.4	18.1	90		
Province 5	73.1	144	9.7	7.4	16.1	97.6	97.6	94.4	9.5	25.3	19.0	16.6	105		
Province 6	63.3	74	14.8	5.6	11.0	94.1	94.1	89.1	5.7	23.2	7.8	8.7	47		
Province 7	80.9	92	9.8	17.3	11.2	99.2	99.2	99.2	8.1	14.8	30.7	10.7	74		
<b>National average</b>	<b>73.8</b>	<b>963</b>	<b>8.1</b>	<b>8.4</b>	<b>15.9</b>	<b>96.2</b>	<b>96.2</b>	<b>95.5</b>	<b>10.9</b>	<b>19.2</b>	<b>15.8</b>	<b>15.6</b>	<b>710</b>		

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

<sup>1</sup> Providers in the facility diagnose STIs or prescribe treatment for STIs or both.

<sup>2</sup> At least one interviewed provider of STI services reported receiving in-service training on STI diagnosis and 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>3</sup> Facility had unexpired syphilis rapid test kit available in the facility.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 9 NON-COMMUNICABLE DISEASES

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### Key Findings

- *The proportion of facilities diagnosing, prescribing treatment, and/or managing patients with diabetes ranged from 15% (Province 2) to 25% (Province 3)*
- *About 73% of facilities nationwide report to offer services for cardiovascular diseases, with a range from 64% (Province 6) to 84% (Province 7).*
- *Nationwide, 94% of facilities diagnose, prescribe treatment for, or manage patients with chronic respiratory diseases ranging from 80% (Province 6) to 97% (Province 7).*

This section summarizes the findings on service availability of major NCDs as measured by the NHFS 2015—diabetes, cardiovascular diseases, and chronic respiratory diseases. This information comes from enumerator observation and interviews with health service providers using the facility inventory questionnaire and the health provider questionnaire.

### 9.1 Diabetes

#### 9.1.1 Availability of services including guidelines, trained staff, and equipment for diabetes services

The proportion of facilities diagnosing, prescribing treatment, and/or managing patients with diabetes ranged from 15% (Province 2) to 25% (Province 3), with a national average of 21%. A small percentage of facilities (4%) provide guidelines for the diagnosis and management of diabetes, and even fewer facilities (2%) have trained staff in providing diabetes services. Nationwide, among the facilities that offer services for diabetes, 94% of the facilities had blood pressure apparatus available, and 88% of the facilities had adult weight scales, while only 30% had height boards or stadiometers available (Table 62).

**Table 63 Guidelines, trained staff, and equipment for diabetes services**

The percentages of facilities offering services for diabetes and among these the percentages of facilities having guidelines, at least one staff member recently trained on diabetes, and the indicated equipment observed to be available at the service site on the day of the survey, by facility type and province.

Background characteristics	Percentages of facilities offering services for diabetes <sup>1</sup>	Number of facilities	Percentages of facilities offering services for diabetes that have:		Equipment			Number of facilities offering services for diabetes
			Guidelines for the diagnosis and management of diabetes	Trained staff <sup>2</sup>	Blood pressure apparatus <sup>3</sup>	Adult weighing scale	Height board or stadiometer	
<b>Facility type</b>								
Zonal and above hospitals	96.6	6	3.5	7.1	89.4	85.9	61.1	6
District level hospitals	97.4	16	8.1	0.0	97.3	93.2	25.7	15
Private hospitals	95.2	70	2.5	2.5	95.7	93.5	35.9	66
PHCCs	75.6	42	3.2	1.3	97.4	87.2	35.3	32
HPs	10.1	775	4.9	1.5	91.4	82.1	20.9	78
UHCs	0.6	32	0.0	0.0	100.0	100.0	0.0	0
<b>Province</b>								
Province 1	23.9	164	1.1	2.6	92.3	91.2	29.4	39
Province 2	15.3	171	0.0	0.0	98.4	66.7	25.2	26
Province 3	25.2	186	1.8	1.4	91.5	88.4	47.0	47
Province 4	17.0	119	3.0	0.0	92.9	91.8	19.3	20
Province 5	22.7	138	15.7	3.8	96.9	92.1	24.8	31
Province 6	21.3	74	5.2	2.6	91.1	98.7	22.0	16
Province 7	21.0	89	2.2	2.2	98.9	87.1	20.1	19
National average	21.1	940	4.1	1.9	94.2	87.7	29.8	198

Note: Stand-alone HTC sites are excluded from this and other tables in this chapter.

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

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

<sup>2</sup> At least one interviewed provider of diabetes services reported receiving in-service training in diabetes services during the 24 months preceding the survey. The training must have involved structured sessions; it does not include individual instructions that a provider might have received during routine supervision.

<sup>3</sup> Functioning digital blood pressure machine or manual sphygmomanometer with stethoscope.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

### 9.1.2 Diagnostic capacity and essential medicines for diabetes services

The diagnostic capacity of health providers differs considerably. On average, only 12% of providers nationwide have a functioning glucometer and unexpired glucose test strips in the facility, while just over half have unexpired urine dipsticks for testing urine protein (54%) and glucose (55%) available in the facility. In Province 2, however, nearly 33% of providers have functioning glucometers compared with just 7% in Province 6. With 29%, Province 6 also has the lowest share of providers who reported to have diagnostic capacity on urine proteins and glucose, at 29%, while 67% to 69% of facilities in Province 3 and 4 have these capacities. The average percentage of facilities nationwide that have metformin and injectable glucose solution available, is 34% and 55% respectively, while only 14% of facilities have Glibenclamide available and 20% have injectable insulin in stock (Table 63).

**Table 64 Diagnostic capacity and essential medicines for diabetes**

The percentages of facilities offering diagnostic capacity and essential medicines for diabetes as observed at the service site on the day of the survey, by facility type and province.

Background characteristics	Diagnostic capacity			Medicines			Injectable glucose solution (5% dextrose)	Number of facilities offering services for diabetes
	Blood glucose <sup>1</sup>	Urine protein <sup>2</sup>	Urine glucose <sup>2</sup>	Metformin	Glibenclamide	Injectable insulin		
<b>Facility type</b>								
Zonal and above hospitals	17.7	81.6	81.6	61.1	39.9	32.1	89.4	6
District level hospitals	17.6	93.2	93.2	59.5	9.5	12.2	91.9	15
Private hospitals	24.7	82.1	85.1	69.5	30.1	50.8	69.9	66
PHCCs	5.1	68.6	67.9	19.2	5.8	0.0	57.7	32
HPs	2.4	14.4	15.5	3.8	3.6	2.5	30.1	78
UHCs	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0
<b>Province</b>								
Province 1	8.7	48.6	49.1	23.4	16.0	11.1	35.4	39
Province 2	32.7	62.6	62.6	32.8	1.6	20.6	36.3	26
Province 3	8.3	65.5	69.7	50.3	23.6	32.4	69.5	47
Province 4	8.3	66.9	64.9	53.0	29.5	32.6	72.1	20
Province 5	8.1	43.5	43.5	30.4	8.5	14.8	53.9	31
Province 6	6.5	28.8	28.8	14.4	2.6	5.2	62.9	16
Province 7	13.6	48.2	52.9	21.9	8.8	13.2	56.7	19
National average	11.9	53.9	55.2	34.3	14.3	19.9	54.5	198

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

<sup>1</sup> Facility had a functioning glucometer and unexpired glucose test strips in the facility on the day of the survey.

<sup>2</sup> Facility had unexpired urine dipsticks for testing for urine protein available in the facility on the day of the survey.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 9.2 Cardiovascular Disease

### 9.2.1 Availability of services including guidelines, trained staff and equipment for cardiovascular disease services

Nearly three-fourths (73%) of facilities nationwide report offering services for cardiovascular diseases, with a range from 64% in Province 6 to 84% in Province 7. At the same time, however, just 1.4% of facilities have guidelines of diagnosis and management of cardiovascular diseases or have provided in-service training over the 24 months preceding the survey. Among the facilities that offer services for cardiovascular diseases, nearly 98% reported having stethoscopes, 94% have blood pressure apparatus, and 88% have adult scales (Table 64).

**Table 65 Guidelines, trained staff, and equipment for cardiovascular diseases**

The percentages of facilities offering services for cardiovascular diseases and among these the percentages of facilities that have guidelines, at least one staff member recently trained on cardiovascular diseases, and the indicated equipment observed to be available at the service site on the day of the survey, by facility type and province.

Background characteristics	Percentages of facilities offering services for cardiovascular diseases <sup>1</sup>	Number of facilities	Percentages of facilities offering services for cardiovascular diseases that have:		Equipment			Number of facilities offering services for cardiovascular diseases
			Guidelines for diagnosis and management of cardiovascular diseases	Trained staff <sup>2</sup>	Stethoscope	Blood pressure apparatus <sup>3</sup>	Adult scale	
<b>Facility type</b>								
Zonal and above hospitals	96.6	6	10.6	3.5	96.5	89.4	85.9	6
District level hospitals	98.7	16	4.0	4.0	98.7	97.3	93.3	15
Private hospitals	94.6	70	1.3	3.0	96.9	95.7	93.5	66
PHCCs	93.2	42	3.1	0.5	99.0	98.4	83.7	40
HPs	70.0	775	1.2	1.1	97.8	92.6	87.0	543
UHCs	55.9	32	0.0	0.0	100.0	100.0	90.7	18
<b>Province</b>								
Province 1	69.7	164	1.7	3.0	96.5	90.5	85.3	114
Province 2	76.9	171	0.0	0.2	94.5	88.7	83.7	131
Province 3	78.3	186	1.3	3.4	98.6	95.0	89.0	145
Province 4	66.5	119	0.3	0.0	99.7	96.4	91.2	79
Province 5	68.4	138	4.8	0.2	99.8	97.9	90.4	94
Province 6	63.8	74	1.3	0.0	97.4	94.4	91.9	47
Province 7	84.4	89	0.5	0.3	100.0	94.2	85.4	75
National average	73.1	940	1.4	1.3	97.8	93.5	87.6	687

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

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

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

<sup>3</sup> Functioning digital BP machine or manual sphygmomanometer with stethoscope

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 9.2.2 Essential medicines and commodities for cardiovascular disease services

The percentage of facilities that have essential medicines and commodities available for cardiovascular disease is low. Only 4% of facilities nationwide have thiazide diuretic in stock, with only 0.2% of facilities in Province 2 and 1.3% in Province 6. The proportion of facilities having beta blockers (atenolol) ranged from 8% (Province 6) to 29% (Province 1), with a national average of 18%. Nationwide, about one facility in every 10 reported availability of calcium channel, aspirin, and oxygen (Table 65).

**Table 66 Availability of essential medicines and commodities for cardiovascular diseases**

The percentages of facilities offering services for cardiovascular disease that report the availability of medicines and commodities observed at the service site on the day of the survey, by facility type and province.

Background characteristics	Percentages of facilities offering services for cardiovascular diseases that have the indicated medicines and commodities					Number of facilities offering services for cardiovascular diseases
	Thiazide diuretic	Beta blockers (atenolol)	Calcium channel blockers (amlodipine)	Aspirin	Oxygen <sup>1</sup>	
<b>Facility type</b>						
Zonal and above hospitals	28.6	35.6	50.5	54.0	36.3	6
District level hospitals	13.3	56.0	72.0	56.0	36.0	15
Private hospitals	26.2	57.0	68.3	63.5	55.1	66
PHCCs	2.6	37.4	18.2	14.0	15.1	40
HPs	1.5	10.8	1.9	1.6	2.5	543
UHCs	0.0	9.8	0.0	0.0	0.0	18
<b>Province</b>						
Province 1	7.9	29.0	9.0	8.0	12.1	114
Province 2	0.2	8.7	6.1	4.3	3.4	131
Province 3	8.0	19.4	17.2	17.3	11.7	145
Province 4	5.4	21.2	17.8	12.0	11.2	79
Province 5	2.6	22.9	9.7	8.6	15.8	94
Province 6	1.3	8.3	5.7	3.5	5.7	47
Province 7	2.9	11.4	10.0	11.8	2.7	75
National average	4.4	18.0	11.2	9.9	9.3	687

Note: The indicators presented in this table comprise the medicines and commodities domain for assessing readiness to provide services for cardiovascular diseases within the health facility assessment methodology proposed by WHO and USAID (2012).

<sup>1</sup> In cylinders or concentrators or an oxygen distribution system

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## 9.3 Chronic Respiratory Diseases

### 9.3.1 Availability of services including guidelines, trained staff, and equipment for chronic respiratory disease services

Nationwide, and average of 94% facilities diagnose, prescribe treatment for, or manage patients with chronic respiratory diseases, ranging from 80% (Province 6) to 97% (Province 7). Among those offering services for chronic respiratory diseases, nearly all facilities have stethoscopes. The availability of other equipment such as oxygen flow meters and spacers for inhalers was low across all seven provinces. Furthermore, on average only 5% of facilities provide guidelines for diagnosis and management of chronic respiratory diseases, and only 9% of providers reported having received in-service training in this area during the 24 months preceding the survey (Table 66).

**Table 67 Guidelines, trained staff, and equipment for chronic respiratory diseases**

The percentages of facilities offering services for chronic respiratory diseases and among these the percentages of facilities that have guidelines, at least one staff member recently trained on chronic respiratory diseases, and the indicated equipment observed to be available at the service site on the day of the survey, by facility type and province.

Background characteristics	Percentages of facilities offering services for chronic respiratory diseases that have:				Equipment			Number of facilities offering services for chronic respiratory diseases
	Percentages of facilities offering services for chronic respiratory diseases <sup>1</sup>	Number of facilities	Guidelines for diagnosis and management of chronic respiratory diseases	Trained staff <sup>2</sup>	Stethoscope	Oxygen flow meter	Spacers for inhalers	
<b>Facility type</b>								
Zonal and above hospitals	96.6	6	10.6	3.5	96.5	25.7	10.9	6
District level hospitals	98.7	16	4.0	9.3	98.7	29.3	12.0	15
Private hospitals	94.9	70	0.6	3.4	96.9	49.3	25.0	66
PHCCs	98.5	42	6.4	9.8	99.0	8.9	6.9	42
HPs	94.6	775	5.0	9.3	97.6	1.5	1.5	733
UHCs	72.1	32	0.9	14.4	100.0	0.0	4.6	23
<b>Province</b>								
Province 1	95.4	164	4.0	3.2	95.7	7.0	2.9	156
Province 2	95.6	171	0.7	20.0	93.9	2.5	2.3	163
Province 3	97.3	186	4.1	3.6	98.9	6.8	4.8	180
Province 4	93.7	119	1.2	4.9	99.8	7.2	3.7	112
Province 5	93.6	138	9.1	9.6	99.8	10.7	6.3	129
Province 6	80.2	74	6.5	4.3	97.9	3.8	3.8	59
Province 7	95.2	89	10.6	17.4	100.0	1.9	2.6	85
National average	94.1	940	4.6	9.0	97.7	6.0	3.8	885

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

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

<sup>2</sup> At least one interviewed provider of service for chronic respiratory diseases reported receiving in-service training in chronic respiratory diseases 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.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

### 9.3.2 Essential medicines and commodities for chronic respiratory diseases

Among the facilities offering chronic respiratory disease services, the proportion having salbutamol inhalers ranged from 49% (Province 6) to 88% (Province 4), with a national average of 79%. The availability of other medicines and commodities for chronic respiratory disease services was relatively low, however, ranging nationwide from 8% for prednisolone tablets to 12% hydro-cortisone tablets, with facilities in Province 2 and 6 reporting the lowest availability and facilities in Province 3 reporting the highest (Table 67).



**Table 68 Availability of essential medicines and commodities for chronic respiratory diseases**

The percentages of facilities offering services for chronic respiratory diseases that have essential medicines and commodities available at the service site on the day of the survey, by facility type and province.

Background characteristics	Percentages of facilities offering services for chronic respiratory diseases that have the indicated medications and commodities						Number of facilities offering services for chronic respiratory diseases
	Salbutamol inhaler	Beclomethasone inhaler	Prednisolone tablets	Hydrocortisone tablets	Injectable epinephrine or adrenaline	Oxygen <sup>1</sup>	
<b>Facility type</b>							
Zonal and above hospitals	68.2	24.8	64.6	89.4	82.3	36.3	6
District level hospitals	90.7	9.3	49.3	78.7	64.0	36.0	15
Private hospitals	68.2	32.9	64.9	69.9	59.1	54.9	66
PHCCs	88.7	11.3	11.8	23.6	16.7	14.8	42
HPs	78.7	2.4	1.6	4.0	2.8	1.9	733
UHCs	90.0	0.0	0.0	0.0	0.0	0.0	23
<b>Province</b>							
Province 1	79.6	3.5	7.9	8.9	10.8	8.8	156
Province 2	70.4	6.8	5.7	5.4	5.1	2.7	163
Province 3	85.0	9.3	12.1	20.0	12.4	9.4	180
Province 4	87.7	5.2	10.0	14.8	8.3	8.0	112
Province 5	86.7	3.0	7.0	10.0	13.2	11.7	129
Province 6	49.0	1.0	3.5	7.2	2.4	4.5	59
Province 7	77.5	3.6	6.2	12.0	7.0	2.4	85
National average	78.8	5.3	8.0	11.6	9.2	7.2	885

Note: The indicators presented in this table comprise the medicines and commodities domain for assessing readiness to provide services for chronic respiratory diseases within the health facility assessment methodology proposed by WHO and USAID (2012).

<sup>1</sup> In cylinders or concentrators or an oxygen distribution system

Source: MoHP, ICF and Abt analysis of 2015 NHFS data



## 10 TUBERCULOSIS

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### Key Findings

- *Over 90% of facilities across all provinces report that they provide TB diagnostic or treatment and/or treatment follow-up services, ranging from 84% in Province 1 to 94% in Province 2.*

This chapter presents findings on the availability of TB services across all facilities, which includes TB diagnostic services, treatment, and follow-up services, as well as the use of guidelines and staff members trained on providing TB services. The data was collected through the facility inventory questionnaire and the health provider questionnaire while enumerators observed the availability of diagnostic and treatment on the day of the survey.

### 10.1 Service Availability and Readiness

#### 10.1.1 Availability of services, guidelines, and trained staff for tuberculosis services

Over 90% of facilities across all provinces report that they provide TB diagnostic or treatment and/or treatment follow-up services. As Table 68 shows, however, only 30% of facilities nationwide indicate that they provide TB diagnostic services as well as treatment and/or treatment follow-up services. On average, a slightly higher percentage of facilities provide screening and referral for TB diagnosis services than treatment and/or treatment follow-up services, except for the average facility in Province 1 and Province 4. Nearly two-thirds of facilities, however, do not provide guidelines on diagnosis and treatment of TB, and only 4% provide practical approach to lung health (PAL) guidelines. Equally, only 5% of facilities report that they provide management of HIV and TB co-infection. On average, 17% of providers indicate that they received in-service training relevant to TB services during the 24 months preceding the survey.

**Table 69 Availability of tuberculosis services, guidelines, and trained staff for tuberculosis services**

The percentages of facilities offering any tuberculosis (TB) diagnostic services or any treatment and/or treatment follow-up services and among these the percentages of facilities having TB guidelines and at least one staff member recently trained in TB services, facility type and province.

Background characteristics	Percentages of all facilities offering:					Number of facilities	Percentages of facilities offering tuberculosis diagnosis and/or treatment services that have:				Number of facilities offering tuberculosis diagnosis and/or treatment services
	Screening and referral for TB diagnosis <sup>1</sup>	Any TB diagnostic services <sup>2</sup>	Any TB treatment and/or follow-up services <sup>3</sup>	Any TB diagnostic and treatment follow-up services	Any TB diagnostic or treatment follow-up services		Guidelines on diagnosis and treatment of TB <sup>4</sup>	PAL guidelines	Management of HIV and TB co-infection	Trained staff <sup>5</sup>	
<b>Facility type</b>											
Zonal and above hospitals	17.8	100.0	75.4	75.4	100.0	6	37.8	3.4	6.8	31.0	6
District level hospitals	32.9	100.0	98.7	98.7	100.0	16	42.1	9.2	9.2	51.3	16
Private hospitals	14.5	97.2	58.4	58.4	97.5	70	8.9	0.6	0.9	12.0	68
PHCCs	37.3	87.8	99.5	87.3	100.0	42	42.2	10.2	8.2	34.9	42
HPs	47.8	25.1	88.2	23.8	94.0	775	36.4	3.5	4.9	15.5	728
UHCs	35.2	5.5	64.3	5.5	66.9	32	33.1	0.0	0.0	17.6	21
<b>Province</b>											
Province 1	35.5	39.8	74.7	31.4	84.2	164	25.9	3.2	4.5	19.3	138
Province 2	48.9	35.5	94.2	34.1	97.6	171	47.5	3.0	3.3	14.2	167
Province 3	41.6	40.2	87.5	35.3	93.2	186	33.0	2.4	5.3	10.9	173
Province 4	52.2	20.5	75.0	16.0	97.8	119	20.6	3.3	3.3	16.2	117
Province 5	46.7	37.6	93.4	34.9	97.0	138	45.2	6.2	6.8	21.3	134
Province 6	44.9	12.9	86.2	11.5	90.8	74	24.9	2.4	2.2	12.6	67
Province 7	39.2	41.2	88.5	37.0	97.0	89	37.0	5.4	7.2	28.8	87
National average	44.0	34.3	85.8	30.2	93.7	940	34.6	3.6	4.7	17.0	882

Note: Stand-alone HTC sites are excluded from this and other tables in this chapter.

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

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

<sup>1</sup> Facility reports that it refers clients outside the facility for TB diagnosis, and there is documentation on the day of the survey visit to support the contention.

<sup>2</sup> Facility reports that providers in the facility make a diagnosis of TB by using any of the following methods: sputum smear only, X-ray only, either sputum or X-ray, both sputum and X-ray, TB rapid diagnostic test (Gene Expert) only, or sputum and X-ray and Gene Expert, or based on clinical symptoms only.

<sup>3</sup> Facility reports that they follow one of the following TB treatment regimens or approaches:

- Directly observe for two months and follow up for four months
- Directly observe for six months
- Follow up clients only after the first two months of direct observation elsewhere
- Diagnose and treat clients while in the facility as inpatients, and then discharge elsewhere for follow-up
- Provide clients with the full treatment with no routine direct observation phase
- Diagnose, prescribe, or provide medicines with no follow-up.

<sup>4</sup> The national TB control program general manual.

<sup>5</sup> At least one interviewed provider of any one of the following TB services reported receiving in-service training relevant to the particular TB service during the 24 months preceding the survey: TB diagnosis and treatment; management of HIV and TB co-infection; MDR-TB treatment, identification of need for referral; or TB infection control. The training must have involved structured sessions; it does not include individual instruction that a provider might have received during routine supervision.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

### 10.1.2 Diagnostic capacity and availability of medicines for tuberculosis treatment

Table 69 shows that many of the facilities that offer TB diagnostics and treatment or treatment follow-up services for TB have very limited TB diagnostic capacities. While on average 10% of facilities have the TB smear microscopy and TB X-ray capacity, less than 1% of facilities have the capacity for administering solid or liquid culture mediums or have TB rapid diagnostic test kits available. There is some variation in availability of these capacities across provinces. For example, the proportion of facilities having TB smear microscopy capacity ranged from 8% (Provinces 2 and 6) to 16% (Province 3). Similarly, nearly 18% of facilities in Province 3 provide TB X-ray services but only 5% of facilities in Province 6 reported this capacity. The availability of HIV diagnostic capacity and systems for diagnosing HIV among TB clients was equally low, with only between 3% and 5% facilities nationwide providing this capacity. Regarding the availability of medicines for treatment of TB, close to 80% of facilities across all provinces reported having first-line treatment for TB, ranging from 64% in Province

1 to nearly 90% in Province 5. Nearly 30% of facilities nationwide provide injectable streptomycin, ranging from 21% in Province 1 to nearly 30% in Province 7.

**Table 70 Diagnostic capacity and availability of medicines for tuberculosis treatment**

The percentages of facilities offering any tuberculosis (TB) diagnostic, treatment or treatment follow-up services that have TB and HIV diagnostic capacity and medicines for TB treatment available at the facility on the day of the survey, by facility type and province.

Background characteristics	Percentages of facilities that have the following TB diagnostic capacity				Percentages of facilities that have		Percentages of facilities that have the following medicines for treating TB		Number of facilities offering tuberculosis diagnosis and/or treatment services
	TB smear microscopy <sup>1</sup>	Culture medium <sup>2</sup>	TB rapid diagnostic test kits	TB X-ray	HIV diagnostic capacity <sup>3</sup>	System for diagnosing HIV among TB clients <sup>4</sup>	First-line treatment for TB <sup>5</sup>	Injectable streptomycin	
<b>Facility type</b>									
Zonal and above hospitals	72.7	13.9	10.5	96.6	75.4	27.3	65.2	65.2	6
District level hospitals	80.3	1.3	2.6	85.5	56.6	25.0	97.4	86.8	16
Private hospitals	41.6	5.2	0.6	89.2	12.7	15.7	29.3	16.4	68
PHCCs	54.8	0.0	1.0	10.7	11.2	17.0	96.6	71.9	42
HPs	2.5	0.0	0.0	0.0	0.6	2.9	79.8	25.9	728
UHCs	0.0	0.0	0.0	0.0	0.0	8.2	91.6	48.2	21
<b>Province</b>									
Province 1	9.2	0.3	0.4	10.2	2.2	2.5	63.9	20.6	138
Province 2	7.6	0.6	0.2	5.9	3.9	5.5	86.4	35.3	167
Province 3	16.4	1.4	0.2	17.5	5.2	5.8	75.6	28.4	173
Province 4	7.8	0.2	0.0	8.5	2.5	3.7	75.4	23.1	117
Province 5	8.1	0.2	0.2	9.2	3.3	7.7	88.4	39.2	134
Province 6	7.6	0.3	0.0	4.6	2.8	2.1	72.4	25.2	67
Province 7	9.3	0.2	0.2	5.5	3.7	8.4	72.5	29.6	87
National average	9.9	0.5	0.2	9.6	3.5	5.2	77.2	29.3	882

Note: The indicators presented in this table comprise the diagnostics and medicines and commodities domains for assessing readiness to provide services for TB within the health facility assessment methodology proposed by WHO and USAID (2012).

<sup>1</sup> Functioning microscope, slides, and all stains for Ziehl-Neelson test (carbol-fuchsin, sulphuric acid, and methyl blue) all were available in the facility on the day of the survey visit or else Fluorescence microscope with auramine stain and glass slides.

<sup>2</sup> Solid or liquid culture medium, e.g., MGIT 960

<sup>3</sup> HIV rapid diagnostic test kits available, or ELISA with reader, incubator, and specific assay

<sup>4</sup> Record or register indicating TB clients who had been tested for HIV

<sup>5</sup> Four-drug fix-dose combination (4FDC) available, or else isoniazid, pyrazinamide, rifampicin, and Ethambutol are all available, or a combination of these medicines, to provide first-line treatment

Source: MoHP, ICF and Abt analysis of 2015 NHFS data



## 11 MALARIA

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### Key Findings

- *Among all facilities, the proportion offering malaria diagnosis and treatment services ranged from 30% (Province 6) to 75% (Province 2).*

This section summarizes results on availability and readiness of services for malaria. The 2015 NHFS collected information on malaria service availability through the facility inventory questionnaire and the health provider questionnaire.

### 11.1 Service Availability and Readiness

#### 11.1.1 Availability of services, guidelines, trained staff, and diagnostic capacity

Table 70 describes the availability of services for malaria, and availability of guidelines, trained staff, and diagnostic capacity in facilities offering malaria services. Among all facilities, the proportion offering malaria diagnosis and treatment services ranged from 30% (Province 6) to 75% (Province 2), with a national average of 51%. Among the facilities with malaria diagnosis or treatment services, the proportion of facilities with malaria-related guidelines ranged from 12% (Province 2) to 33% (Province 1), with a national average of 20%. Similarly, the proportion of facilities with malaria RDT ranged from 28% (Province 2) to 63% (Province 3), with a national average of 40%.

**Table 71 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 or treatment services and, among facilities offering malaria diagnosis or treatment services, the percentages that have guidelines, trained staff, and diagnostic capacity to support the provision of quality service for malaria, by facility type and province

Background characteristics	Percentages of all facilities offering malaria diagnosis or treatment services <sup>1</sup>		Guidelines	Trained staff		Diagnostics			Number of facilities offering malaria diagnosis or treatment services
	Number of facilities		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	96.6	6	14.9	0.0	3.5	85.9	71.7	92.9	6
District level hospitals	93.4	16	16.9	25.4	25.4	63.4	62.0	88.7	15
Private hospitals	93.1	70	0.6	1.0	1.0	83.3	55.4	89.7	65
PHCCs	85.0	42	23.4	27.4	25.7	65.2	49.1	77.2	36
HPs	45.8	775	22.9	26.1	19.2	28.3	3.3	28.8	354
UHCs	16.3	32	17.9	53.0	49.0	13.9	0.0	13.9	5
<b>Province</b>									
Province 1	47.1	164	32.6	35.7	30.7	40.4	20.6	42.5	77
Province 2	75.3	171	12.2	23.3	13.2	27.5	8.7	28.8	128
Province 3	34.4	186	18.6	20.0	19.0	63.3	37.7	68.0	64
Province 4	35.6	119	15.4	11.5	8.2	40.0	14.0	44.8	43
Province 5	73.0	138	22.9	21.1	16.8	35.4	9.9	38.4	101
Province 6	30.2	74	13.5	25.1	15.4	44.4	14.8	48.1	22
Province 7	51.9	89	19.7	16.7	17.2	51.0	17.7	55.4	46
National average	51.2	940	19.6	22.8	17.6	40.1	16.3	43.1	481

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

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 or treatment services.

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

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

<sup>4</sup> Facility had 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.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

### 11.1.2 Availability of malaria medicines and commodities

Table 71 presents the availability of malaria medicines and commodities among facilities offering malaria diagnosis or treatment services. The proportion of facilities that have any first-line treatment facility for malaria ranged from 48% (Province 6) to 67% (Province 1), with a national average of 60%. The availability of long-lasting insecticide-treated nets (LLIN) ranged from 2% (Province 4 and 6) to 16% (Province 3), with a national average of 11%.



**Table 72 Availability of malaria medicines and commodities**

Among facilities offering malaria diagnosis 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 facility type and province

Background characteristics	Antimalarial medicines										Other medicines and commodities		Number of facilities offering malaria diagnosis or treatment services
	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	14.4	14.4	50.5	32.1	50.5	10.6	10.9	3.5	96.5	75.2	7.1	6	
District level hospitals	5.6	11.3	54.9	43.7	56.3	4.2	5.6	4.2	98.6	94.4	11.3	15	
Private hospitals	3.0	19.5	44.9	12.8	47.1	2.7	7.1	3.0	72.0	71.7	1.0	65	
PHCCs	3.4	6.8	65.8	52.6	67.5	5.1	2.9	0.0	98.9	89.7	17.8	36	
HPs	1.1	5.6	58.3	33.2	61.6	1.6	0.0	0.0	99.2	87.1	12.0	354	
UHCs	0.0	0.0	68.9	55.6	68.9	0.0	0.0	0.0	100.0	82.1	0.0	5	
<b>Province</b>													
Province 1	2.4	14.8	63.5	45.0	67.4	1.3	0.8	0.3	93.0	83.3	10.0	77	
Province 2	1.3	4.6	59.6	29.9	62.8	2.5	0.0	0.0	94.7	84.3	13.3	128	
Province 3	3.8	7.5	53.2	27.0	53.6	2.4	3.1	2.4	89.9	85.3	15.6	64	
Province 4	0.5	9.7	48.9	28.1	48.9	1.0	6.3	0.5	99.5	91.3	1.5	43	
Province 5	1.6	6.7	57.5	31.1	63.7	1.4	0.8	0.4	98.1	88.4	11.1	101	
Province 6	0.0	6.3	47.7	26.2	47.7	6.3	0.9	0.0	97.2	73.9	1.8	22	
Province 7	2.0	6.7	54.6	36.2	55.5	3.2	1.8	0.9	99.1	84.1	10.4	46	
National average	1.8	7.8	57.0	32.5	59.9	2.2	1.5	0.6	95.5	85.2	10.8	481	

Note: The indicators for first-line anti-malaria medicines, sulfadoxine/pyrimethamine, paracetamol, and LLINs presented in this table correspond to the medicines and commodities domains for assessing readiness to provide services for malaria within the health facility assessment methodology proposed by WHO and USAID (2012).

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

<sup>1</sup> Stand-alone HTC facilities are excluded from this table.

<sup>2</sup> Facility had any of the following recommended first-line antimalarial medicines available in the facility on the day of the survey: ACT (Coartem) tablets, quinine tablets, chloroquine tablets or primaquine tablets.

<sup>3</sup> Facility had long-lasting insecticide-treated bed nets (LLINs) available in the facility store or at ANC site for distribution to clients.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data



## 12 FACTORS ASSOCIATED WITH SELECTED INDICATORS ON SERVICE AVAILABILITY AND READINESS

In this chapter we present the results from the multivariate analysis on five selected (dependent) variables related to service availability and readiness, namely: provision of quality ANC services, provision of quality family planning services, provision of quality IMNCI services, availability of basic diagnostic tests, and safe disposal of health care waste. This analysis investigates whether the percentage differences on these indicators shown in the bivariate analysis among the provinces could be explained by some other factors. We use the following independent variables for this analysis: province; ecological region; facility type; management meeting in the health facility with community participation; whether the facility engages in regular quality assurance activities; and whether the facility engages in routine training and personal supervision.

### 12.1 Provision of Quality Antenatal Care Services

**Table 73** Factors associated with provision of quality antenatal care services

Among all ANC clients, factors associated with provision of quality ANC services (n=1478)			
	aOR	95% CI	p-value
<b>Province</b>			
Province 3	1		
Province 1	2.06	0.75-5.65	0.16
Province 2	1.58	0.46-5.39	0.46
Province 4	2.11	0.56-7.92	0.27
Province 5	<b>4.51</b>	<b>1.58-12.91</b>	<b>0.005</b>
Province 6	3.25	0.65-16.21	0.15
Province 7	2.52	0.77-8.22	0.13
<b>Ecological region</b>			
Hills	1		
Mountains	1.99	0.56-7.09	0.29
Tarai	1.08	0.54-2.13	0.83
<b>Facility type</b>			
Public hospitals	1		
Private hospitals	1.52	0.45-5.13	0.5
Peripheral health facilities	2.04	0.93-4.46	0.07
<b>Management meeting with community participation at least once every 6 months</b>			
No meeting	1		
Meeting	0.89	0.48-1.65	0.71
<b>Regular Quality Assurance (QA) activities</b>			
No QA activities	1		
QA activities	<b>0.44</b>	<b>0.22-0.86</b>	<b>0.02</b>
<b>Routine training and personal supervision</b>			
No training and supervision	1		
Training and supervision	1.28	0.49-3.36	0.61

\*Notes: Provision of quality ANC services was measured for following four items: clients received services by a SBA trained provider (observed at the health facility), clients reported being counselled on at least three danger signs, client recommended facility to others, and client reported no problem regarding waiting time.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

As Table 72 shows, Province 5 had four and half times higher odds of providing quality ANC services compared with the reference, Province 3, after controlling for the other relevant variables. The multivariate analysis is consistent with the results of the bivariate analysis in Section 3.5.3. In both analyses, we found that Province 5 had the highest provision of quality ANC services. Additionally, facilities that engage in regular Quality Assurance (QA) activities appear to have slightly lower odds of having quality ANC services, which seems somewhat contradictory but could be because provision of quality ANC services might be affected by other factors such as availability of trained human resources, availability of equipment, medicines, and required diagnostic testing facilities. Other factors, such as

geographical terrain, facility type, management meetings, and routine training and personal supervision were not associated with provision of quality ANC services.

## 12.2 Provision of Quality Family Planning Services

**Table 74 Factors associated with provision of quality family planning services**

Among all family planning clients, factors associated with provision of quality family planning services (n=714)			
	aOR	95% CI	p-value
<b>Province</b>			
Province 4	1		
Province 1	<b>12.56</b>	<b>2.24-70.33</b>	<b>0.004</b>
Province 2	<b>8.32</b>	<b>1.08-64.14</b>	<b>0.04</b>
Province 3	<b>7.28</b>	<b>1.27-41.77</b>	<b>0.03</b>
Province 5	<b>9.45</b>	<b>1.42-63.03</b>	<b>0.02</b>
Province 6	6.15	0.78-48.63	0.09
Province 7	<b>44.04</b>	<b>7.76-249.82</b>	<b>&lt;0.0001</b>
<b>Ecological region</b>			
Mountains	1		
Hills	<b>3.51</b>	0.93-13.26	0.06
Tarai	<b>3.02</b>	0.91-10.08	0.07
<b>Facility type</b>			
Private hospitals	1		
Public hospitals	<b>3.52</b>	0.42-29.81	0.25
Peripheral health facilities	<b>2.63</b>	0.31-22.37	0.38
<b>Management meeting with community participation at least once every 6 months</b>			
No Meeting	1		
Meeting	1.94	0.95-3.95	0.07
<b>Regular Quality Assurance (QA) activities</b>			
No QA activities	1		
QA activities	1.12	0.56-2.78	0.58
<b>Routine training and personal supervision</b>			
No training and supervision	1		
Training and supervision	0.69	0.32-1.48	0.34

\*Notes: Provision of quality family planning services was measured for following five items: clients received services by a family planning trained provider (observed at the health facility), clients reported being counselled on side effects, client told what to do if any problems occurred and when to return for follow up, client recommended facility to others, and client reported no problem regarding waiting time.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

Table 73 shows that, compared with Province 4 (the reference), all other provinces except Province 6 had statistically significantly higher odds of providing quality family planning services after controlling the other relevant variables. Province 6 also appeared more likely than Province 4 to have quality family planning services, but with a slightly lower confidence interval (CI) than with the other provinces. These findings are consistent with the findings from the bivariate analysis presented in Section 3.5.3. Geographical terrain, facility type, management meetings, regular QA activities, and routine training and personal supervision were not associated with provision of quality family planning services.

## 12.3 Provision of Quality IMNCI Services

**Table 75 Factors associated with provision of quality IMNCI services**

Among all sick child clients, factors associated with provision of quality IMNCI services* (n=2031)			
	aOR	95% CI	p-value
<b>Province</b>			
Province 7	1		
Province 1	1.07	0.46-2.48	0.88
Province 2	1.28	0.50-3.29	0.61
Province 3	2.5	<b>1.16-5.38</b>	<b>0.02</b>
Province 4	1.85	0.77-4.48	0.17
Province 5	1.92	0.78-4.72	0.15
Province 6	2.66	<b>1.01-7.05</b>	<b>0.04</b>
<b>Ecological region</b>			
Tarai	1		
Mountains	0.86	0.36-2.04	0.73
Hills	1.19	0.57-2.49	0.65
<b>Facility type</b>			
Private hospitals	1		
Public hospitals	1.04	0.45-2.39	0.93
Peripheral health facilities	<b>4.03</b>	1.92-8.45	<0.0001
<b>Management meeting with community participation at least once every 6 months</b>			
No meeting	1		
Meeting	1.1	0.69-1.77	0.69
<b>Regular Quality Assurance activities</b>			
No QA activities	1		
QA activities	0.91	0.58-1.45	0.71
<b>Routine training and personal supervision</b>			
No training and supervision	1		
Training and supervision	1.48	0.88-2.47	0.14

\*Notes: Provision of quality IMNCI services was measured for following five items: clients received services by a IMNCI trained provider (observed at the health facility), care taker told about child's diagnosis, availability of amoxicillin tab/cap or cotrimoxazole and zinc & ORS, client recommended facility to others, and client reported no problem regarding waiting time

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

As Table 74 shows, Provinces 3 and 6 had statistically significantly higher odds of providing quality IMNCI services in comparison with Province 7, the reference, after controlling for the other relevant variables. These findings are consistent with the findings from the bivariate analysis presented in Section 3.5.3. In addition, peripheral health facilities (PHCC, HPs, and UHCs) were also more likely (with four times higher odds) to provide quality IMNCI services in comparison with private hospitals. Other factors, including geographical terrain, management meetings, regular QA activities, and routine training and personal supervision were not associated with the provision of quality IMNCI services.

## 12.4 Availability of Basic Diagnostic Tests

**Table 76 Factors associated with availability of basic diagnostic tests**

Among all facilities, factors associated with availability of basic diagnostic tests* (n=825)			
	aOR	95% CI	p-value
<b>Province</b>			
Province 6	1		
Province 1	0.82	0.34-1.96	0.65
Province 2	1.69	0.54-5.23	0.36
Province 3	1.13	0.50-2.56	0.77
Province 4	1.18	0.40-3.50	0.76
Province 5	2.08	0.81-5.39	0.13
Province 7	0.96	0.33-2.79	0.94
<b>Ecological region</b>			
Mountains	1		
Hills	0.66	0.37-1.18	0.16
Tarai	0.93	0.40-2.16	0.86
<b>Facility type</b>			
Peripheral Health Facilities	1		
Public Hospitals	34.77	<b>20.45-59.13</b>	<b>&lt;0.0001</b>
Private Hospitals	47.22	<b>24.39-91.39</b>	<b>&lt;0.0001</b>
<b>Management meeting with community participation at least once every 6 months</b>			
No meeting	1		
Meeting	0.89	0.47-1.68	0.71
<b>Regular Quality Assurance activities</b>			
No QA activities	1		
QA activities	1.3	0.71-2.37	0.39
<b>Routine training and personal supervision</b>			
No Training and supervision	1		
Training and supervision	1.19	0.66-2.15	0.57

\*Notes: Four basic tests out of the 8 basic tests included in the 2015 NHFS have been considered for this multivariate analysis. They are: hemoglobin, blood glucose, urine protein and urine glucose.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

As Table 75 shows, the multivariate analysis findings on percentage differences among the provinces on the availability of basic diagnostic tests are not consistent with the bivariate analysis presented in Section 3.2.3. This appears to be because the facility type is much more indicative of whether a facility has access to basic diagnostic tests. Hospitals, both public and private, have higher odds of availability of all four basic tests included in this analysis. None of the other factors included in the regression were significant.

## 12.5 Proper Disposal of Health Care Waste

**Table 77 Factors associated with safe disposal of health care waste (sharps waste and other medical waste)**

Among all facilities, factors associated with proper disposal of health care waste* (n=825)			
	aOR	95% CI	p-value
<b>Province</b>			
Province 4	1		
Province 1	1.92	0.81-4.56	0.14
Province 2	1.34	0.49-3.65	0.57
Province 3	2.36	0.97-5.72	0.06
Province 5	1.86	0.72-4.80	0.20
Province 6	<b>3.53</b>	<b>1.09-11.47</b>	<b>0.04</b>
Province 7	1.5	0.59-3.81	0.39
<b>Ecological region</b>			
Hills	1		
Mountains	0.80	0.39-1.65	0.55
Tarai	1.36	0.75-2.48	0.31
<b>Facility type</b>			
Private hospitals	1		
Public hospitals	1.32	0.63-2.78	0.46
Peripheral health facilities	1.62	0.80-2.48	0.31
<b>Management meeting with community participation at least once every 6 months</b>			
No meeting	1		
Meeting	1.49	0.88-2.53	0.14
<b>Regular Quality Assurance activities</b>			
No QA activities	1		
QA activities	0.89	0.51-1.56	0.69
<b>Routine training and personal supervision</b>			
No training and supervision	1		
Training and supervision	0.84	0.45-1.55	0.58

\*Notes: health care waste includes both safe final disposal of sharps waste and safe final disposal of medical waste.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

Table 76 shows that Province 6 had higher odds of disposing the health care waste safely compared with Province 4, the reference, in both analyses. However, Provinces 1, 3, and 4, which in Section 3.2.2 were shown to have higher proportions of facilities disposing of health care waste safely, did not appear to have that difference after controlling for other variables in multivariate analysis. Other factors tested were not associated with safe final disposal of health care waste (both sharps and medical waste).





## 13 DISCUSSION

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This report presents the results from the further analysis of the 2015 NHFS on service availability and readiness by province in Nepal. Overall, we found some aspects of service availability and readiness to be substantially low across all the provinces, while outcomes for some indicators were poor in only some provinces. Upon multivariate analysis of some of the selected indicators, we found that some provinces had higher odds of having quality services, availability of basic diagnostic tests, and proper disposal of health care waste.

**Maternal Health:** Despite several efforts to improve maternal health situation in the country, the maternal mortality ratio (MMR) remains high for Nepal, at 239 maternal deaths per 100,000 live births. The pregnancy-related mortality ratio has declined slightly, from 281 pregnancy-related deaths per 100,000 live births in 2006 to 259 in 2016) but the difference is not statistically significant, indicating inadequate improvement in maternal health outcomes. (Ministry of Health, New ERA et al. 2017) Access to ANC and to quality ANC services are vital components of safe motherhood that would ultimately improve the maternal health status of the country. Over the last two decades the proportion of women aged 15-49 years, who had a live birth in the 5 years before the survey, receiving ANC from a skilled provider for their most recent birth has increased steadily, from 28% in 2001 to 84% in 2016. (Ministry of Health, New ERA et al. 2017), While access has increased, it appears that quality has not kept pace, however. In the 2015 NHFS, among all ANC clients observed/interviewed we found that only 5% met all four criteria related to the provision of quality ANC services—client received service by an SBA trained provider, client reported being counselled on at least three danger signs of pregnancy, client recommended the facility to others, and client reported no problems regarding waiting time. In general, the proportion of facilities offering quality ANC services was low across nearly all provinces. The two exceptions were Provinces 4 and 5. Province 4 was slightly better off, and in multivariate analysis Province 5 had statistically significant odds four and half times those of Province 3, the reference, for provision of quality ANC services.

**Family Planning:** Increasing the use of contraceptive methods depends to some extent on the quality of family planning services provided at health facilities. Provision of quality family planning services among the clients observed in the 2015 NHFS was 10% nationwide, with Provinces 4 and 6 being the worst off. Compared with Province 4, all other provinces had higher odds of providing quality family planning services, characterized as meeting all five items—client received service by a trained family planning provider, client reported being counselled on side effects, clients told what to do if any problems occurred and when to return for follow up, client recommended the facility to others, and client reported no problems regarding waiting time). This finding suggests that the government should prioritize improving family planning services in Provinces 4 and 6 first, though resources are needed eventually across the nation. Improvement in the provision of quality family planning services would also help increase the use of modern contraception among the currently married women age 15-49, a level that has remained stagnant over the past decade, at 44% in 2006 and 43% in 2016 (Ministry of Health, New ERA et al. 2017).

**Child Health:** Similar to ANC, quality of sick child care is important, along with an increase in access to IMNCI services when a child is sick. In comparison with other service components (ANC and family planning), a higher proportion of IMNCI clients (24%) observed/interviewed receiving care met all five items of quality IMNCI service provision at the national level. However, there is further need to improve the quality of care for IMNCI services. The components of quality care for IMNCI services include:

client received services by a IMNCI trained provider, care taker told about child's diagnosis, availability of amoxicillin tab/cap or cotrimoxazole and zinc and ORS, client recommended the facility to others, and client reported no problems regarding waiting time. Province 3 and Province 6 had slightly higher odds of providing quality IMNCI services, while peripheral health facilities including PHCCs, HPs and UHCs, which form the backbone of primary health care in the country, had four times higher odds of providing quality IMNCI services. This could be further strengthened as the country moves towards the path of universal health coverage (UHC), along with the goal of achieving the Sustainable Development Goals (SDGs), especially on child health. The NHSS has an ambitious target of having 90% of clients provided with quality ANC, family planning, and IMNCI services by 2020 (Ministry of Health and Population 2015), which would require a huge improvement in all these three areas of service provision.

**Diagnostics:** We found lower odds of availability of basic diagnostic tests (hemoglobin, blood glucose, urine glucose, urine protein) in the peripheral health facilities, and availability of basic services such as those tests need to be increased in the context of the NHSS aiming to have 90% of health facilities provide selected laboratory services as per standard by 2020. (Ministry of Health and Population 2015)

**Health Care Waste Management:** The 2015 NHFS found that 77% of health facilities properly disposed health care waste (both sharps and medical waste), with slight variation across the provinces. Province 6 had three and half times higher odds of disposing health care waste separately, otherwise no other factors were significantly associated with safe final disposal of health care waste. An overall improvement on health care waste management is required to meet the 100% target of NHSS by 2020. (Ministry of Health and Population 2015)

## Limitations of the Study

This report is one in the further analysis series of the 2015 NHFS to disseminate the results on service availability, readiness, and quality of care by seven provinces of Nepal. As with other analyses, it also has some limitations.

- The 2015 NHFS results could only be analyzed at the level of provinces, but not below as the sample size was not large enough. Hence, facility-wide results within provinces were not possible.
- Not all results are included in the main body of the report.
- We have carried out multivariate analysis only for few selected outcome variables and have not adjusted the analysis with client-level characteristics.

## 14 CONCLUSIONS AND FUTURE DIRECTIONS

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### 14.1 Conclusions

To conclude, we summarize below the low-performing indicators and relatively better indicators (compared with the national average) by province.

#### Province 1

Low performing indicators:

- All 18 tracer medicines availability was <1%.
- Availability of ANC guidelines was the lowest, at 15% against the national average of 35%.
- Availability of urine protein and urine glucose testing capacity for ANC services was 13% and 12% respectively, against the national average of 15% and 13% respectively.
- Availability of TB screening and referral services was the lowest, at 35% against the national average of 44%.

Relatively better indicators:

- Disaggregating waste at the time of collection was the highest, at 90% against the national average of 86%.
- Safe final disposal of sharps and medical waste was done by 82% of facilities (highest among the provinces), against the national average of 77%.
- Offering all five temporary methods of family planning was the highest, at 60% against the national average of 44%.

#### Province 2

Low performing indicators:

- Availability of all 18 tracer medicines was <1%.
- Availability of vaccine carrier with ice pack was 61% against the national average of 75%.
- Availability of measuring tape for fundal height was 20% against the national average of 30%.
- Availability of urine protein and urine glucose testing capacity for ANC services was 12% each.
- Availability of the all essential medicines for routine ANC was the lowest, at 69% against the national average of 90%.
- Availability of CAC services was the lowest, at 45% against the national average of 59%.

Relatively better indicators:

- A maximum of 42% facilities offering normal vaginal delivery services had assisted delivery against the national average of 26%.

### Province 3

Low performing indicators:

- Availability of all 18 tracer medicines was <1%.
- Availability of urine protein and urine glucose testing capacity for ANC services was 20% and 19% respectively.
- Among all government facilities, 66% of the sanctioned posts for health service providers were filled against the national average of 71%.
- Among the ANC clients observed, service provided by an SBA trained provider was the lowest. at 31% against the national average of 43%.
- Availability of diabetes services was the lowest, at 15% against the national average of 25%.

Relatively better indicators:

- Like Province 1, Province 3 also had a maximum of 82% facilities doing safe final disposal of sharps and medical wastes against the national average of 77%.
- Availability of amoxicillin (syrup, suspension, or dispersible tablets) for sick child care was the highest, at 39% against the national average of 24%.
- Vaccine carrier with ice pack was available in a maximum of 81% of facilities against the national average of 75%.
- STI services were available in a maximum of 83% against a national average of 74%.

### Province 4

Low performing indicators:

- Safe final disposal of sharps and medical waste was done by the lowest proportion of facilities, at 64% with national average of 77%.
- Only 3% of health posts had diagnostic testing capacity against the national average of 13%.
- Availability of all 18 tracer medicines was <1%.
- Availability of child vaccination guidelines was the lowest, at 40% against the national average of 55%.
- The proportion of facilities that offered all five temporary methods of family planning was lowest, at 24% against the national average of 44%.
- The proportion of facilities having at least one trained staff in ANC services was the lowest, at 16% against the national average of 27%.
- Availability of urine protein and urine glucose testing capacity for ANC services was 18% and 11% respectively.
- Of the facilities offering normal vaginal delivery services only 15% had assisted delivery services against the national average of 26%, and only 15% had at least one trained staff for delivery care against the national average of 35%.
- Availability of all essential medicines for delivery was found in only 8% of the facilities against the national average of 12%.

Relatively better indicators:

- Of the sanctioned posts in government health facilities for all health service providers, a maximum of 83% was fulfilled against the national average of 74%.

- Availability of all essential medicines for routine ANC was the highest, at 99% against the national average of 90%.
- Facilities offering any TB diagnostics, or treatment, and/or treatment follow up was the highest, at 98% against the national average of 94%.

## **Province 5**

Low performing indicators:

- Availability of all 18 tracer medicines was 1%.
- Availability of urine protein and urine glucose testing capacity for ANC services was 13% and 12% respectively.

Relatively better indicators:

- ANC service provision by an SBA trained service provider was the highest, at 62% against the national average of 43%.
- Availability of cotrimoxazole (syrup, suspension or dispersible tablets) for sick child care was the highest at 59% against the national average of 49%.
- Availability of vaccination guidelines was the highest, at 72% compared to national average of 55%.
- Similar to Province 4, availability of all essential medicines for routine ANC was the highest, at 99% against the national average of 90%.

## **Province 6**

Low performing indicators:

- Availability of all basic client services was the lowest, at 52% against the national average of 62%.
- The proportion of facilities segregating waste at the time of collection was the lowest, at 68% against the national average of 86%.
- Availability of all 18 tracer medicines was <1%.
- Availability of urine protein and urine glucose testing capacity for ANC services was 17% and 12% respectively.
- Availability of some of the essential medicines for sick child care was the lowest: amoxicillin (syrup, suspension or dispersible tablets) at 14% against the national average of 24%; and cotrimoxazole (syrup, suspension or dispersible tablets) at 37% against the national average of 49%.
- Availability of at least one trained provider on EPI was the lowest, at 13% against the national average of 21%.
- The proportion of facilities providing all five temporary methods of family planning from their own facilities was only 8% against the national average of 14%.
- Availability of STI services was the lowest, at 63% against the national average of 74%.
- Availability of syphilis rapid diagnostic capacity was the lowest, at 11% against the national average of 16%.

Relatively better indicators:

- Care to the sick child by an IMNCI trained service provider was the highest, at 56% compared to national average of 41%.
- Availability of vaccine carrier with ice pack was the highest, at 81% against the national average of 75%.
- Availability of CAC services was the highest, at 75% against the national average of 59%.

## Province 7

Low performing indicators:

- Availability of all 18 tracer medicines was <1%.
- The proportion of facilities offering BCG vaccination prior to discharge was the lowest, at 4% with the national average of 12%.
- Availability of urine protein, urine glucose testing, and hemoglobin testing capacity for ANC services was 17%, 12%, and 9% respectively.
- Availability of syphilis rapid diagnostic capacity was among the lowest, at 11% against the national average of 16%.

Relatively better indicators:

- The proportion of health posts with laboratory services was the highest, at 32% against the national average of 13%.
- The proportion of family planning services offered by a trained provider was the highest, at 68% against the national average of 54%.
- The proportion of facilities with at least one trained service provider for ANC services was the highest, at 47% against the national average of 27%.
- Availability of services for cardiovascular diseases and chronic respiratory diseases respectively was the highest, at 84% against the national average of 73%, and 97% against the national average of 94%.

Major gaps among provinces exist in: diagnostic service availability in HPs; availability of key essential medicines for child health services; ANC service readiness in terms of availability of guidelines, equipment such as measuring tape for fundal height, diagnostic testing capacity, and essential medicines. There also appears to be a substantial gap in provision of quality services for ANC, family planning, and IMNCI among the provinces. Province 5 had four and half times higher odds of providing quality ANC services after adjustment of covariates. Similarly, in comparison with Province 4 all provinces had higher odds of providing quality family planning services, after adjustment of covariates, except Province 6. Province 3 and 6 had higher odds of providing quality IMNCI services in comparison with Province 7 after adjustment of covariates. Peripheral health facilities also had higher odds of providing quality IMNCI services. We found that availability of basic diagnostic tests was affected by level of health facility and facility type, with hospital level facilities, both public and private, having higher odds of availability after adjustment of covariates. Province 6 had higher odds of disposing health care waste.

## 14.2 Future Directions

The focus needs to be on improving service availability and readiness in the lowest performing provinces. Specific areas of focus required for each of the seven provinces are listed below.

**Province 1:** Focus on increasing availability of tracer medicines, ANC guidelines for quality ANC service provision, urine protein and glucose testing for ANC clients, and availability of TB screening and referral services.

**Province 2:** Focus on improving availability of tracer medicines, vaccine carriers with ice packs, measuring tape for fundal height, urine protein and glucose testing capacity, essential medicines for routine ANC, and CAC services.

**Province 3:** Focus on improving availability of tracer medicines, urine protein and glucose testing capacity, fulfilling the sanctioned posts for service providers in government health facilities, ANC service provision by an SBA trained service provider, and diabetes services. Furthermore, there appears to be a clear necessity of improving provision of quality ANC services in this province.

**Province 4:** Focus on improving the provision of safe final disposal of medical waste, diagnostic capacity in health posts, offering temporary methods of family planning, and availability of tracer medicines, child vaccination guidelines, trained staff in ANC services, urine protein and glucose testing capacity for ANC services, assisted delivery services and trained staff for delivery care, and essential medicines for delivery. There also appears to be a clear need to improve provision of quality family planning services in this province.

**Province 5:** Focus on improving availability of tracer medicines, and urine protein and glucose testing capacity for ANC services.

**Province 6:** Focus on improving availability of basic client services, provision of waste segregation at the time of collection, tracer medicines, urine protein and glucose testing capacity, essential medicines for sick child care, trained provider on EPI, provision of temporary methods of family planning, STI services, and syphilis rapid diagnostic capacity.

**Province 7:** Focus on improving availability of tracer medicines, offering BCG vaccination prior to discharge, urine protein, urine glucose and hemoglobin testing capacity, and syphilis rapid diagnostic capacity. Furthermore, improving provision of quality IMNCI services appears to be a clear necessity in this province.





## REFERENCES

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Ministry of Health, Nepal; New ERA, Nepal; and ICF. 2017. *Nepal Demographic and Health Survey 2016*. Kathmandu, Nepal: Ministry of Health, Nepal.

Ministry of Health, Nepal; New ERA, Nepal; Nepal Health Sector Support Program (NHSSP); and ICF. 2017. *Nepal Health Facility Survey 2015*. Kathmandu, Nepal: Ministry of Health, Nepal.

Ministry of Health and Population, Nepal. 2015. *Nepal Health Sector Strategy 2015-2020*. Kathmandu, Nepal: Government of Nepal, Ministry of Health and Population, Nepal.

World Health Organization (WHO). 2015. *Service Availability and Readiness Assessment (SARA) Reference Manual*. Geneva, Switzerland: WHO.



# ANNEX ADDITIONAL RESULTS ON SERVICE AVAILABILITY AND READINESS BY PROVINCE

Here in the Annex, we include the remaining tables of province-wide analysis of 2015 NHFS that are not included in the main text above.

## Annex 1.1 Facility Level Infrastructure, Resources, Management, General Service Readiness, and Quality of Care

**Annex Table 1 Availability of basic amenities for client services**

Among all facilities, the percentages with indicated amenities considered basic for quality services, by facility type and province

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>		All amenities excluding computer with internet
<b>Facility type</b>									
Zonal and above hospitals	100.0	96.6	86.1	93.2	100.0	89.8	93.2	75.8	6
District level hospitals	94.7	93.4	89.5	96.1	88.2	76.3	93.4	68.4	16
Private hospitals	99.4	89.4	95.7	98.4	98.5	78.7	94.5	77.8	70
PHCCs	73.2	94.2	93.2	94.7	41.2	36.4	74.8	23.3	42
HPs	42.1	79.0	76.2	78.8	8.2	0.4	54.2	2.8	775
UHCs	23.7	75.1	58.4	79.9	14.4	0.0	59.3	0.0	32
Stand-alone HTC	71.4	94.0	99.1	90.9	88.2	81.3	67.4	39.8	23
<b>Province</b>									
Province 1	51.3	85.9	88.1	90.4	21.4	11.1	57.0	11.0	166
Province 2	21.6	91.5	78.1	71.4	9.6	7.5	67.0	7.6	174
Province 3	53.8	80.6	74.8	86.7	31.4	17.8	69.0	19.6	192
Province 4	49.2	73.8	74.5	81.9	17.2	9.9	57.9	10.0	122
Province 5	43.8	84.5	75.4	80.8	19.1	14.3	62.2	11.8	144
Province 6	87.0	64.5	75.7	74.3	23.1	4.4	32.7	6.0	74
Province 7	63.2	70.6	83.2	81.4	17.8	8.6	48.6	8.1	92
National average	48.9	81.0	78.6	81.6	20.2	11.4	59.4	11.4	963

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

<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.

<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, a private cellular phone that is supported by the facility, or a functioning short wave radio available in the facility.

<sup>6</sup> 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> 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.

<sup>8</sup> Facility has regular electricity, improved water source, visual and auditory privacy, client latrine, communication equipment and emergency transport.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 2 Availability of basic equipment**

Among all facilities, the percentages with equipment considered basic to quality client services available in the general outpatient service area, by facility type and province

Background characteristics	Equipment							All basic equipment	Number of facilities
	Adult weighing scale	Child weighing scale <sup>1</sup>	Infant weighing scale <sup>2</sup>	Thermometer	Stethoscope	Blood pressure apparatus <sup>3</sup>	Light source <sup>4</sup>		
<b>Facility type</b>									
Zonal and above hospitals	86.3	27.3	23.9	93.2	96.6	89.8	82.9	10.2	6
District level hospitals	93.4	38.2	42.1	97.4	98.7	97.4	88.2	21.1	16
Private hospitals	94.1	25.6	40.8	96.4	96.7	95.6	88.8	13.8	70
PHCCs	84.4	38.8	50.4	94.2	99.0	98.1	66.9	18.4	42
HPs	88.1	41.1	59.2	92.5	97.7	93.4	45.0	12.7	775
UHCs	93.5	25.0	33.0	95.5	100.0	100.0	59.4	5.5	32
Stand-alone HTC	85.9	9.1	21.5	79.0	91.4	91.4	72.7	3.1	23
<b>Province</b>									
Province 1	88.3	34.1	49.6	96.9	95.5	91.4	47.4	4.1	166
Province 2	83.8	27.0	48.5	84.3	93.9	87.5	25.6	5.8	174
Province 3	89.6	31.8	51.5	96.6	98.8	95.3	65.6	14.7	192
Province 4	93.8	48.8	70.2	94.5	99.8	97.7	67.2	25.4	122
Province 5	89.1	43.5	62.7	95.4	99.5	98.2	57.9	13.6	144
Province 6	89.6	45.0	53.8	89.3	98.3	96.4	39.5	13.9	74
Province 7	87.0	55.3	55.6	88.9	99.8	95.0	54.1	17.9	92
National average	88.5	38.5	55.2	92.7	97.6	94.0	51.2	12.7	963

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

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

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

<sup>3</sup> A digital blood pressure machine or a manual sphygmomanometer with a stethoscope available somewhere in the general outpatient area.

<sup>4</sup> A spotlight source, that can be used for client examination or a functioning flashlight available somewhere in the general outpatient area.

<sup>5</sup> Facility has adult scale, child scale, infant scale, thermometer, stethoscope, blood pressure apparatus and light source all available on the day of the survey.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 3 Standard precautions for infection control**

Percentages of facilities with sterilization equipment somewhere in the facility and other items for standard precautions available in the general outpatient area of the facility on the day of the survey, by managing authority and province

Items	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
Any sterilization equipment <sup>1</sup>	78.9	89.6	80.3	68.3	82.9	92.7	73.7	79.0	88.4	79.9
Safe final disposal of sharps waste <sup>2</sup>	84.1	85.5	85.9	83.6	89.6	73.8	83.3	86.6	84.4	84.2
Safe final disposal of infectious waste <sup>3</sup>	81.5	76.1	84.5	74.1	86.7	69.9	86.7	84.7	78.6	81.0
Appropriate storage of sharps waste <sup>4</sup>	81.1	35.2	75.1	70.3	78.0	81.4	83.1	84.7	66.2	76.7
Appropriate storage of infectious waste <sup>5</sup>	4.8	8.4	4.4	4.9	3.3	8.4	6.0	4.0	6.1	5.2
Disinfectant <sup>6</sup>	62.4	64.2	57.4	48.1	74.6	64.5	76.7	61.9	50.1	62.6
Syringes and needles <sup>7</sup>	84.2	63.8	79.8	82.3	81.6	90.8	85.1	86.6	68.2	82.2
Soap	55.8	74.3	56.5	40.1	62.3	60.6	77.0	53.9	50.9	57.5
Running water <sup>8</sup>	46.3	75.6	50.8	27.2	52.7	59.4	60.9	55.9	42.9	49.2
Soap and running water	42.8	72.9	46.1	22.5	51.1	59.1	60.6	42.5	38.6	45.7
Alcohol-based hand disinfectant	25.6	48.0	28.6	15.2	36.4	36.4	35.3	20.0	14.7	27.7
Soap and running water or else alcohol-based hand disinfectant	52.5	84.6	59.7	32.6	64.5	70.5	66.4	45.5	44.1	55.5
Latex gloves <sup>9</sup>	79.6	80.0	79.3	73.6	85.5	86.7	83.3	79.4	64.8	79.7
Medical masks	16.1	47.4	14.0	4.4	29.5	35.4	19.0	15.3	16.3	19.1
Gowns	6.8	30.9	7.8	2.5	9.5	12.0	14.1	6.5	13.6	9.1
Eye protection	1.7	4.0	2.4	0.7	0.5	0.9	4.6	0.3	5.1	2.0
Needle destroyer	2.4	27.5	2.9	1.6	6.7	7.9	5.6	5.4	4.6	4.8
Guidelines for standard precautions <sup>10</sup>	3.3	7.9	1.4	0.7	4.0	12.6	3.4	3.4	2.1	3.7
All infection prevention items except eye protection <sup>11</sup>	0.0	1.8	0.0	0.6	0.1	0.5	0.0	0.3	0.0	0.2
Number of facilities	871	92	166	174	192	122	144	74	92	963

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

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

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

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

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

<sup>5</sup> Sharps container observed in general outpatient service area, in area where HIV testing is done if facility does HIV testing, as well as in area where minor surgery is done, if facility does minor surgeries.

<sup>6</sup> Waste receptacles observed in general outpatient service area, in area where HIV testing is done if facility does HIV testing, as well as in area where minor surgery is done, if facility does minor surgeries.

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

<sup>8</sup> Single-use standard disposable syringes with needles or else auto-disable syringes with needles available in the general outpatient area.

<sup>9</sup> Piped water, water in bucket with specially fitted tap, or water in pour pitcher available in the general outpatient area.

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

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

<sup>12</sup> Facility meets all the following infection prevention criteria: sterilization equipment or equipment for high-level disinfection, safe final disposal of sharps waste, safe final disposal of infectious waste, appropriate storage of sharps waste, appropriate storage of infectious waste, disinfectant, syringes and needles, soap and running water or else alcohol-based hand disinfectant, latex gloves, medical masks, gowns, needle destroyer and guidelines for standard precautions.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 4 Capacity for processing of equipment for reuse**

Percentages of facilities with the equipment and other items to support the final processing of instruments for reuse, by facility type and province

Background characteristics	Percentages of facilities having:				Number of facilities
	Equipment <sup>1</sup>	Equipment and knowledge of process time <sup>2</sup>	Equipment, knowledge of process time, and automatic timer <sup>3</sup>	Written guidelines for sterilization or HLD <sup>4</sup>	
<b>Facility type</b>					
Zonal and above hospitals	100.0	93.2	69.0	13.9	6
District level hospitals	96.1	86.8	47.4	5.3	16
Private hospitals	98.1	97.8	57.2	1.7	70
PHCCs	94.7	82.1	34.4	5.8	42
HPs	78.0	59.4	14.8	4.3	775
UHCs	66.0	54.9	9.6	0.0	32
Stand-alone HTC	63.6	57.2	27.8	15.2	23
<b>Province</b>					
Province 1	80.3	59.1	15.7	5.0	166
Province 2	68.3	51.9	9.7	0.2	174
Province 3	82.9	75.3	28.7	1.9	192
Province 4	92.7	77.0	19.5	2.7	122
Province 5	73.7	52.5	22.3	11.1	144
Province 6	79.0	52.7	11.8	8.0	74
Province 7	88.4	78.2	30.3	5.1	92
National average	79.9	63.6	19.8	4.4	963

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

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

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

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

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

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

<sup>3</sup> An automatic timer here refers to a passive timer that can be set to indicate when a specified time has passed. It may be part of the sterilization process or the HLD equipment.

<sup>4</sup> The national medical standards for reproductive health volume 1: contraceptive services. Hand-written instructions that are pasted on walls and that clearly outline the procedures for processing of equipment are acceptable.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 5 Laboratory diagnostic capacity - advanced tests and diagnostic imaging**

Among PHCCs and hospitals, the percentages with capacity to conduct advanced laboratory diagnostic tests in the facility, by managing authority and province

Laboratory tests	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
<b>Advanced level diagnostic tests</b>										
Serum electrolytes	10.6	45.2	21.4	27.0	48.2	33.4	9.1	9.1	7.0	28.6
Full blood count with differentials <sup>1</sup>	57.2	75.9	65.6	60.9	76.1	72.6	57.8	54.5	60.5	66.9
Blood typing and cross matching <sup>2</sup>	15.1	22.0	12.8	18.4	24.4	18.7	19.7	12.1	11.6	18.7
CD4 count <sup>3</sup>	2.9	0.0	0.9	1.0	1.0	4.3	0.0	3.0	2.3	1.4
Syphilis serology <sup>4</sup>	14.5	31.7	15.0	25.4	30.7	14.4	28.4	21.2	14.0	23.4
Gram stain <sup>5</sup>	32.2	54.3	43.4	33.2	56.8	40.6	31.6	45.5	34.9	43.7
General microscopy <sup>6</sup>	66.5	63.1	69.6	53.7	66.1	66.6	56.1	72.7	79.1	64.8
Stool microscopy <sup>7</sup>	63.0	63.1	69.6	49.6	65.6	65.1	53.8	69.7	74.4	63.1
CSF/body fluid counts <sup>8</sup>	76.8	93.5	88.0	74.0	89.1	88.5	84.1	81.8	88.4	85.5
TB microscopy <sup>9</sup>	62.7	40.5	40.8	50.6	56.6	53.6	45.3	57.6	58.1	51.1
TB culture <sup>10</sup>	1.6	5.1	1.7	4.8	5.7	1.4	1.1	3.0	2.3	3.4
TB rapid diagnostic test <sup>11</sup>	2.3	0.6	2.6	2.1	1.0	0.0	1.1	0.0	2.3	1.4
DBS collection <sup>12</sup>	6.1	6.8	7.3	10.6	3.6	10.1	5.7	0.0	9.3	6.5
Liver or renal function test (ALT or Creatinine) <sup>13</sup>	19.0	71.8	45.5	35.1	64.3	55.3	28.8	24.2	30.2	46.5
<b>Equipment for diagnostic imaging</b>										
X-ray machine <sup>14</sup>	37.0	86.9	58.5	49.0	72.7	69.7	68.0	45.5	53.5	63.0
Ultrasonogram	28.3	84.5	50.2	47.7	71.7	55.3	49.2	54.5	55.8	57.5
CT scan	3.9	16.4	9.0	5.8	18.6	7.2	7.6	3.0	2.3	10.4
Number of PHCCs and hospitals	64	70	24	20	42	14	18	7	9	134

<sup>1</sup> Facility had a functioning hematology analyzer or else a hemocytometer with glass slides and a functioning microscope for hemocytometer available at the facility on the day of the survey.

<sup>2</sup> Facility reports that it conducts blood grouping at the facility and had all of the following reagents available at the facility on the day of the survey: anti-A reagent, anti-B reagent, anti-D reagent, Coomb's reagent and anti-AB reagent.

<sup>3</sup> Facility reports that it conducts CD4 testing and had a functioning flow cytometer (e.g., a FACS count machine (BD or Patek brand with reagents or PIMA brand with cartridges) or CD4 rapid test strips available at the facility on the day of the survey.

<sup>4</sup> Facility reports it conducts syphilis serology testing at the facility and had VDRL or RPR with a functioning rotator or shaker, or else PCR for STIs (CTN), or treponema pallidum hemagglutination assay TPHA available at the facility on the day of the survey.

<sup>5</sup> Facility had crystal violet or gentian violet, Lugol's iodine or Lugol's solution, acetone or acetone alcohol, or neutral red, carbol fuchsin or other counter stains for gram staining available at the facility on the day of the survey.

<sup>6</sup> Facility had a functioning microscope with glass slides available at the facility on the day of the survey.

<sup>7</sup> Facility had a functioning microscope with glass slides as well as formal saline (for concentration method), normal saline (for direct microscopy), or Lugol's iodine or Lugol's solution available at the facility on the day of the survey for stool microscopy.

<sup>8</sup> Facility had a functioning centrifuge and test tubes available at the facility on the day of the survey.

<sup>9</sup> Facility reports that it conducts Ziehl-Neelson test for AFB at the facility and had a functioning microscope with glass slides, carbol-fuchsin, sulphuric acid (20-25% concentration) or acid alcohol, and methylene blue all available at the facility on the day of the survey.

<sup>10</sup> Facility had a culture/growth medium for Mycobacterium Tuberculosis, an incubator, and a biosafety hood or cabinet available at the facility on the day of the survey.

<sup>11</sup> Facility had at least one unexpired TB rapid diagnostic test kit (Gene Expert) available at the facility on the day of the survey.

<sup>12</sup> Facility reports that they use filter paper cards to collect dried blood spots (DBS) at the facility and had at least one unexpired filter paper card available at the facility on the day of the survey.

<sup>13</sup> Facility had a functioning blood chemistry analyzer or a functioning bilirubinometer/colorimeter that provides serum bilirubin available at the facility on the day of the survey.

<sup>14</sup> Facility had a functioning digital X-ray machine (not requiring a film) or else a functioning traditional X-ray machine with unexpired films available at the facility on the day of the survey.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 6 Management meetings and quality assurance**

Among all facilities, the percentages with regular management meetings and having documentation of a recent meeting, the percentages of facilities with quality assurance activities and having documentation of quality assurance activities, and the percentages of facilities with a system for eliciting client opinion, by facility type and province

Background characteristics	Percentages of facilities with				Number of facilities
	Management meeting at least once every 6 months, with observed documentation of a recent meeting	Management meeting with community participation at least once every 6 months, with documentation of a recent meeting	Regular quality assurance activities with observed documentation of quality assurance activity <sup>1</sup>	System for determining client opinion, procedure for reviewing client opinion and report of recent review of client opinion	
<b>Facility type</b>					
Zonal and above hospitals	37.6	20.5	31.0	0.0	6
District level hospitals	56.6	38.2	30.3	7.9	16
Private hospitals	37.0	10.3	16.4	13.7	70
PHCCs	51.9	39.3	16.5	4.4	42
HPs	37.2	37.8	20.6	1.4	775
UHCs	16.0	25.3	9.5	0.0	32
<b>Province</b>					
Province 1	31.5	41.9	20.3	1.1	164
Province 2	26.2	24.9	11.5	0.7	171
Province 3	42.6	35.3	24.7	5.7	186
Province 4	45.9	30.6	24.5	2.0	119
Province 5	46.0	39.4	21.5	3.2	138
Province 6	29.4	32.8	17.7	3.8	74
Province 7	41.0	45.5	19.1	0.5	89
National average	37.4	35.3	19.9	2.5	940

Note: This table excludes stand-alone HTC sites <sup>1</sup> Facility reports that it routinely carries out quality assurance activities and had documentation of a recent quality assurance activity. This could be a report or minutes of a quality assurance meeting, a supervisory checklist, a mortality review or an audit of records or registers.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data



**Annex Table 7 Supportive management practices at the facility level**

Among all facilities, the percentages that had an external supervisory visit during the four months before the survey, and the percentages of facilities where at least half of the interviewed providers reported receiving routine work-related training and personal supervision recently, by facility type and province

Background characteristics	Percentages of facilities with supervisory visit during the 4 months before the survey <sup>1</sup>	Number of facilities	Percentages of facilities having routine:				Number of facilities where at least two eligible providers were interviewed with health worker interview questionnaire <sup>5</sup>
			Staff training <sup>2</sup>	Personal supervision <sup>3</sup>	Training and personal supervision	Percentages with supportive management practices <sup>4</sup>	
<b>Facility type</b>							
Zonal and above hospitals	68.3	6	48.1	75.8	27.3	27.3	6
District level hospitals	93.4	16	86.8	78.9	59.2	55.3	16
Private hospitals	89.8	70	24.7	67.2	11.6	11.3	68
PHCCs	96.6	42	90.6	83.2	71.5	71.0	42
HPs	92.8	775	95.2	80.6	75.5	74.4	570
UHCs	87.6	32	94.2	82.9	82.9	78.9	18
Stand-alone HTC	100.0	23	82.3	97.0	77.9	77.9	20
<b>Province</b>							
Province 1	84.3	166	91.3	78.3	67.1	66.1	122
Province 2	96.7	174	89.5	87.9	77.2	76.7	138
Province 3	94.5	192	75.8	74.6	56.1	55.1	138
Province 4	89.8	122	83.8	74.5	64.4	64.2	106
Province 5	98.7	144	89.6	84.4	76.7	75.9	112
Province 6	84.6	74	93.7	75.2	64.6	56.8	49
Province 7	96.7	92	97.5	82.0	77.8	77.8	75
National average	92.6	963	87.5	80.0	68.9	67.8	740

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

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

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

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

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

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 8 Staffing pattern in surveyed facilities**

Median number of providers assigned to, employed by, or seconded to facility, by facility type and province

Facility type	Median number of providers assigned to, employed by, or seconded to facility					Number of facilities
	Consultant	MD-GP	Medical officer	Nurse	Paramedic <sup>1</sup>	
<b>Facility type</b>						
Zonal and above hospitals	11.1	1.6	18.4	44.4	22.4	6
District level hospitals	-	-	3.5	8.4	7.6	16
Private hospitals	5.6	-	2.9	11.3	10.1	70
PHCCs	-	-	1.4	4.4	4.9	42
HPs	-	-	-	2.1	2.6	775
UHCs	-	-	-	1.5	1.5	32
<b>Province</b>						
Province 1	-	-	-	2.2	2.6	164
Province 2	-	-	-	1.7	2.8	171
Province 3	-	-	-	2.3	2.6	186
Province 4	-	-	-	2.1	2.6	119
Province 5	-	-	-	2.3	3.0	138
Province 6	-	-	-	2.8	2.6	74
Province 7	-	-	-	3.0	2.8	89
National average	-	-	-	2.2	2.7	940

Note: This table excludes stand-alone HTC sites.

Note: The numbers shown in this table were provided by the facility in-charge or by the human resources manager wherever applicable.

<sup>1</sup> Paramedic includes the following cadres: HA, AHW, SAHW, public health inspector, laboratory technologist, laboratory officer, laboratory technician, laboratory assistant, radiographer, and dark room assistant.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 9 HMIS status: HMIS reporting and designated focal person**

Among all health facilities, the percentages that compile HMIS report regularly and percentages that have a designated HMIS focal person; among all facilities that compile HMIS report regularly, the percentages having the previous month's HMIS report, and among facilities with a designated HMIS focal person, the percentages with the HMIS focal person trained in HMIS, by facility type and province

Background characteristics	Among all facilities, percentages that:			Last month's HMIS report observed	Number of facilities that compile HMIS report regularly	Among all government facilities with a designated focal person, percentages having:	Number of facilities with designated HMIS focal person
	Compile HMIS report regularly	Have a designated HMIS focal person	Number of facilities			HMIS focal person trained on HMIS	
<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>Province</b>							
Province 1	95.9	67.6	164	100.0	140	100.0	95
Province 2	95.0	63.9	171	100.0	114	100.0	100
Province 3	95.9	53.6	186	100.0	152	100.0	89
Province 4	98.3	44.9	119	100.0	88	100.0	53
Province 5	90.1	49.1	138	100.0	106	100.0	60
Province 6	87.9	28.7	74	100.0	51	100.0	16
Province 7	91.3	53.4	89	100.0	70	100.0	43
National average	94.1	54.2	940	100.0	721	100.0	456

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

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 10 HMIS status: HMIS tool kits and user manual**

Among all public facilities, the percentages having HMIS tool kits, and the percentages having HMIS user manual and other HMIS related materials, by facility type and province

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>Province</b>							
Province 1	43.7	12.5	65.6	72.5	30.0	152	
Province 2	37.9	12.1	52.2	60.2	16.8	161	
Province 3	28.8	16.1	38.1	65.0	22.0	157	
Province 4	45.4	4.9	52.8	61.8	19.7	112	
Province 5	54.0	13.0	55.2	53.8	36.2	129	
Province 6	31.8	13.3	47.0	51.3	35.4	72	
Province 7	45.1	13.6	57.7	38.3	37.4	86	
National average	40.8	12.3	52.6	59.6	26.9	871	

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

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 11 LMIS status**

Among all public facilities, the percentages that compile LMIS report regularly, have designated LMIS focal person, have LMIS guideline, and the percentages that have the pull system manual; among public facilities that compile LMIS report regularly, the percentages where a copy of the latest submitted LMIS report was observed, and among public facilities that have a designated LMIS focal person, the percentages where the LMIS focal person was trained on LMIS, by facility type and province

Background characteristics	Among all public facilities, percentages that:					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	Number of public health facilities				
<b>Facility type</b>									
Zonal and above hospitals	51.9	64.9	6.8	10.2	6	52.6	3	57.9	4
District level hospitals	88.2	90.8	19.7	25.0	16	67.2	14	59.4	14
PHCCs	93.1	81.1	17.0	17.0	42	76.0	40	65.9	34
HPs	95.8	60.7	11.9	17.0	775	74.9	742	60.6	470
UHCs	64.3	32.1	0.6	9.0	32	72.3	20	23.9	10
<b>Province</b>									
Province 1	90.0	68.6	11.6	21.1	152	82.2	137	51.4	104
Province 2	94.6	71.3	7.8	6.5	161	68.5	152	68.6	115
Province 3	95.4	54.0	5.0	22.6	157	72.4	150	48.8	85
Province 4	94.8	53.9	11.4	12.8	112	65.7	106	63.9	60
Province 5	96.9	57.9	21.2	21.7	129	81.5	125	69.6	75
Province 6	90.2	51.9	21.9	21.8	72	73.6	65	60.0	37
Province 7	96.0	65.1	10.3	11.8	86	79.7	83	60.0	56
National average	94.1	61.2	11.8	16.8	871	74.7	819	60.2	533

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

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 12 Activities of HFOMCs and HDCs**

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 facility type and province

Background characteristics	Percentages of interviewed HFOMC/HDC members reporting that they:			
	Attended at least one HFOMC or HDC meeting in last three 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)	Number of interviewed HFOMC and HDC members
<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>Province</b>				
Province 1	82.1	12.0	40.1	211
Province 2	70.6	19.5	44.8	193
Province 3	82.3	11.8	47.6	201
Province 4	89.3	23.3	62.8	148
Province 5	85.6	18.3	57.5	197
Province 6	88.3	28.3	41.5	96
Province 7	80.7	39.6	61.1	131
National average	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 three months and the member reported attending at least one such meeting.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 13 Financial audit, disaster preparedness and drill down exercise**

Among all facilities, the percentages completed financial audit, having disaster preparedness and conducted drill down exercise by facility type and province

Background characteristics	Percent of HFs who have completed financial audit			Percent of HFs having disaster preparedness contingency plan		Percent of HFs conducted "drill down" exercise as part of disaster preparedness training	Number of facilities
	Last fiscal year (2070/71)	Last three successive fiscal year (2069/70 - 2070/71)	No. of facilities	Reported	Observed		
<b>Facility type</b>							
Zonal and above hospitals	96.3	96.3	6	27.6	3.4	24.2	6
District level hospitals	94.7	93.4	16	19.7	1.3	2.6	16
Private hospitals	-	-	0	12.0	4.6	9.4	70
PHCCs	69.5	63.6	42	14.7	3.4	3.9	42
HPs	46.8	40.3	775	4.3	1.3	1.9	775
UHCs	-	-	0	2.3	0.0	0.0	32
Stand-alone HTCs	-	-	0	2.2	0.0	2.2	23
<b>Province</b>							
Province 1	43.9	39.8	146	2.8	0.2	2.8	166
Province 2	33.8	25.2	157	6.3	1.1	1.8	174
Province 3	47.2	45.6	147	6.1	3.0	2.6	192
Province 4	55.2	45.4	109	4.5	0.5	3.7	122
Province 5	61.6	56.4	125	6.4	2.4	0.9	144
Province 6	46.3	40.8	72	9.1	3.2	4.6	74
Province 7	66.9	55.7	83	5.4	0.4	3.7	92
National average	49.2	42.9	839	5.6	1.6	2.6	963

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## Annex 1.2 Child Health Services

**Annex Table 14 Frequency of availability of child health services - curative care and growth monitoring**

Among all facilities offering outpatient curative care for sick children and growth monitoring, the percentages providing the service at the facility at specific frequencies, by facility type and province

Background characteristics	Outpatient curative care of sick children (Days per week <sup>1</sup> )			Child growth monitoring (Days per week <sup>1</sup> )		
	1-2 days per week	5 or more days per week	Number of facilities excluding HTCs, Sukra Raj and Bir hospitals	1-2 days per week	5 or more days per week	Number of facilities excluding HTCs and Sukra Raj hospital
<b>Facility type</b>						
Zonal and above hospitals	0.0	100.0	6	0.0	95.8	5
District level hospitals	2.7	96.0	15	2.7	94.5	15
Private hospitals	0.6	99.4	65	0.0	100.0	38
PHCCs	0.5	99.0	42	0.5	99.0	41
HPs	0.5	99.5	775	0.1	99.9	749
UHCs	4.3	93.5	31	5.5	91.7	24
<b>Province</b>						
Province 1	2.1	97.7	161	0.4	99.5	151
Province 2	0.1	99.9	171	0.1	99.9	146
Province 3	0.4	99.6	184	0.4	99.5	169
Province 4	0.0	100.0	119	0.0	100.0	119
Province 5	0.7	98.7	137	0.7	98.6	131
Province 6	0.0	100.0	74	0.0	99.7	73
Province 7	0.7	99.3	89	0.2	99.8	84
National average	0.6	99.2	934	0.3	99.5	872

<sup>1</sup> Some facilities provide the service less than one day per week; therefore, the total percentages may not add to 100 percent.

<sup>2</sup> Excludes stand-alone HTCs, Sukra Raj and Bir hospitals.

<sup>3</sup> Excludes stand-alone HTCs and Sukra Raj hospital.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 15 Items for infection control**

Among facilities offering outpatient curative care services for sick children, the percentages with indicated items for infection control observed to be available at the service site on the day of the survey, by facility type and province

Background characteristics	Items for infection control										Number of facilities offering outpatient curative care for sick children	
	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	Safety box	Needle destroyer	Waste receptacle <sup>2</sup>	Injection safety precaution guideline		All infection prevention items <sup>3</sup>
<b>Facility type</b>												
Zonal and above hospitals	71.0	74.5	71.0	54.0	96.5	71.7	46.0	14.1	3.5	10.6	0.0	6
District level hospitals	57.3	64.0	54.7	36.0	68.0	68.0	54.7	9.3	14.7	5.3	2.7	15
Private hospitals	70.8	71.8	68.8	51.2	83.3	77.4	43.2	19.4	17.7	3.6	2.4	65
PHCCs	62.2	66.5	59.3	24.2	63.6	61.2	71.4	7.3	9.7	4.8	1.0	42
HPs	54.5	44.9	41.1	24.5	50.6	80.5	84.9	1.7	5.4	2.8	0.0	775
UHCs	52.5	37.4	35.1	35.7	51.6	78.5	88.9	0.0	0.0	3.3	0.0	31
<b>Province</b>												
Province 1	53.4	49.9	44.8	26.3	57.3	76.4	76.5	1.6	5.5	0.6	0.1	161
Province 2	39.6	26.8	21.8	15.5	32.1	74.0	75.1	1.2	5.0	0.7	0.6	171
Province 3	61.5	52.1	49.8	35.9	63.3	85.6	84.6	4.4	6.1	3.5	0.0	184
Province 4	58.8	57.6	57.3	36.0	69.0	86.0	88.4	7.2	8.7	12.1	0.2	119
Province 5	76.8	59.8	59.5	35.0	65.1	82.6	86.0	3.1	8.2	2.2	0.3	137
Province 6	54.5	56.2	43.0	22.4	48.3	80.2	80.3	2.8	4.9	1.1	0.6	74
Province 7	46.6	38.9	32.9	12.1	38.8	64.8	73.6	3.8	6.8	1.5	0.2	89
National average	56.0	48.0	44.1	27.1	54.0	79.1	80.8	3.3	6.4	3.0	0.3	934

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

<sup>2</sup> Waste receptacle with plastic bin liner.

<sup>3</sup> All infection precaution items include: soap and running water or else alcohol-based hand disinfectant, latex gloves, waste receptacle with plastic bin liner, safety box or needle destroyer, and injection safety precaution guideline.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 16 Laboratory diagnostic capacity**

Among facilities offering outpatient curative care services for sick children, the percentages with indicated items for infection control observed to be available at the service site on the day of the survey and the percentages having the indicated laboratory diagnostic capacity in the facility, by facility type and province

Background characteristics	Laboratory diagnostic capacity				Number of facilities offering outpatient curative care for sick children
	Hemoglobin <sup>1</sup>	Malaria <sup>2</sup>	Stool microscopy <sup>3</sup>	All three tests	
<b>Facility type</b>					
Zonal and above hospitals	96.5	89.4	85.9	75.2	6
District level hospitals	97.3	82.7	82.7	68.0	15
Private hospitals	94.1	85.6	63.6	51.8	65
PHCCs	74.7	65.6	52.4	42.7	42
HPs	3.6	13.2	2.2	2.0	775
UHCs	0.0	2.3	0.0	0.0	31
<b>Province</b>					
Province 1	14.0	18.8	11.4	8.7	161
Province 2	11.7	21.7	7.3	6.6	171
Province 3	24.1	23.3	17.3	14.6	184
Province 4	12.3	16.0	9.0	6.5	119
Province 5	14.8	28.2	9.1	8.1	137
Province 6	8.9	14.3	6.1	4.7	74
Province 7	14.4	28.6	9.1	8.4	89
National average	15.1	21.8	10.5	8.8	934

Note: The laboratory diagnostic capacity indicator measures presented in this table comprise the indicators in the diagnostics domain for assessing readiness to provide preventative and curative child health services within the health facility assessment methodology proposed by WHO and USAID (WHO 2012).

<sup>1</sup> Facility had functioning equipment and reagents for colorimeter, hemoglobinometer, or HemoCue.

<sup>2</sup> Facility had unexpired malaria rapid diagnostic test kit available somewhere in the facility or a functioning microscope with necessary stains and glass slides to perform malaria microscopy.

<sup>3</sup> Facility had a functioning microscope with glass slides and formal saline (for concentration method) or normal saline (for direct method) or Lugol's iodine solution.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 17 Infection control for vaccination services**

Among facilities offering child vaccination services, the percentages with indicated items for infection control observed to be available at the service site on the day of the survey, by facility type and province

Percentages of facilities offering child vaccination services that have indicated items for infection control												
Background characteristics	Soap	Running water <sup>1</sup>	Soap and running water	Alcohol-based hand disinfectant	Soap and running water or else alcohol-based hand disinfectant	Latex gloves	Safety box	Needle destroyer	Waste receptacle <sup>2</sup>	Injection safety precaution guideline	All infection prevention items <sup>3</sup>	Number of facilities offering child vaccination services
<b>Facility type</b>												
Zonal and above												
hospitals	87.5	87.5	87.5	37.7	87.5	83.4	83.1	24.9	4.2	25.2	0.0	5
District level												
hospitals	57.4	61.8	54.4	41.2	66.2	75.0	83.8	10.3	17.6	7.4	4.4	14
Private hospitals	77.0	77.7	72.3	54.6	84.5	73.4	72.6	20.4	20.6	4.1	2.0	20
PHCCs	56.2	62.8	53.1	23.4	60.3	68.4	84.7	8.2	9.7	4.1	1.0	40
HPs	53.7	44.5	41.4	24.5	50.3	81.7	88.7	2.0	5.8	3.4	0.5	710
UHCs	52.4	38.4	35.6	35.2	51.4	74.2	92.5	0.0	0.0	4.0	0.0	26
<b>Province</b>												
Province 1	50.2	48.5	43.5	25.3	53.4	74.9	85.2	1.0	6.3	0.8	0.1	146
Province 2	38.0	24.0	19.4	9.8	28.5	71.7	80.3	0.1	5.5	0.0	0.0	143
Province 3	57.4	49.9	47.5	32.2	59.4	87.4	94.9	3.3	3.2	4.4	0.1	159
Province 4	56.1	54.6	54.4	38.1	66.6	87.5	94.0	7.4	12.9	13.4	3.7	109
Province 5	76.8	60.4	60.1	36.6	65.4	87.0	93.3	3.4	8.0	4.4	0.2	121
Province 6	53.5	54.3	42.1	24.8	48.3	77.9	80.0	3.2	5.3	1.3	0.6	64
Province 7	51.4	37.6	34.0	9.4	39.6	74.6	83.8	4.4	3.8	1.5	0.3	73
National average	54.6	46.6	43.0	25.9	52.1	80.5	88.1	3.0	6.4	3.7	0.7	816

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

<sup>2</sup> Waste receptacle with plastic bin liner.

<sup>3</sup> All infection precaution items include: soap and running water or else alcohol-based hand disinfectant, latex gloves, waste receptacle with plastic bin liner, safety box or needle destroyer, and injection safety precaution guideline.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 18 Assessments and examinations of sick children**

Among sick children whose consultations with a provider were observed, the percentages for whom the indicated assessment, examination, or intervention was a component of the consultation, by managing authority and province

Components of consultation	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
<b>Qualification of provider</b>										
Consultation conducted by consultant/specialist or medical doctor general practitioner (MD-GP)	6.2	72.2	12.2	4.1	37.4	13.5	16.2	2.1	0.3	15.5
Medical officer (MO)	14.7	22.0	15.0	5.3	29.9	23.0	12.9	8.1	8.8	15.7
Consultation conducted by nursing professional, including degree nurse or degree midwife	14.9	0.0	13.9	10.3	4.5	15.3	7.8	31.4	32.4	12.8
Consultation conducted by a paramedic	63.8	5.8	58.9	79.5	27.9	48.3	62.3	58.4	58.5	55.6
<b>History: assessment of general danger signs</b>										
Inability to eat or drink anything	21.2	23.9	27.0	11.5	18.6	29.2	27.8	31.0	26.2	21.6
Vomiting everything	19.2	28.2	25.7	13.3	22.0	26.0	23.0	16.5	22.2	20.5
Convulsions	4.3	6.6	9.5	3.0	3.9	4.9	5.4	5.2	2.1	4.7
All general danger signs	2.2	0.7	5.4	1.2	0.8	3.2	2.0	2.5	0.6	2.0
<b>History: assessment of main symptom</b>										
Cough or difficulty breathing	54.0	68.1	64.2	38.3	70.4	62.3	54.8	49.9	51.7	56.0
Diarrhea	40.8	41.2	42.2	28.5	38.1	48.0	45.1	53.6	57.9	40.8
Fever	75.8	85.6	76.1	62.8	87.8	89.5	71.2	76.9	86.0	77.2
All three main symptoms <sup>1</sup>	24.2	28.3	31.9	11.6	28.0	33.3	26.8	27.5	28.3	24.8
Ear pain or discharge from ear	19.0	7.7	20.1	19.3	13.7	13.9	17.1	25.7	16.1	17.4
All 3 main symptoms plus ear pain/discharge	9.4	2.3	12.4	5.8	7.3	6.6	9.6	14.1	7.6	8.4
<b>History: other assessment</b>										
Asked about TB disease in any parent in last 5 years	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Asked if 2 or more episodes of diarrhea in child each lasting more than 14 days	0.5	0.0	1.1	0.0	0.0	0.0	0.7	0.0	1.8	0.4
<b>Physical examination</b>										
Took child's temperature with thermometer <sup>2</sup>	56.0	57.8	66.8	33.7	60.8	68.5	65.3	68.6	54.8	56.2
Counted respiration (breaths) for 60 seconds	24.1	22.6	25.4	11.8	28.7	28.1	22.5	37.6	28.6	23.9
Checked skin turgor for dehydration	6.8	4.7	3.7	5.6	5.8	10.7	7.5	6.4	10.8	6.5
Checked for pallor by looking at palms	3.1	7.9	2.2	1.9	5.2	5.3	5.9	2.2	4.0	3.8
Checked for pallor by looking at conjunctiva	11.0	18.7	7.9	9.6	13.6	16.7	16.0	9.7	13.5	12.1
Looked into child's mouth	8.4	29.2	12.2	3.4	23.8	12.6	6.9	6.7	5.7	11.4
Checked for neck stiffness	1.1	0.8	1.7	0.0	1.8	0.3	1.6	0.8	0.2	1.0
Looked in child's ear	10.4	7.9	15.0	10.1	10.7	11.7	7.1	6.5	5.6	10.0
Felt behind child's ears for tenderness	5.9	5.4	7.4	5.2	5.3	7.3	6.1	2.0	7.5	5.8
Pressed both feet to check for edema	1.7	1.5	2.5	1.4	1.9	0.0	1.1	2.7	1.6	1.7
Checked for enlarged lymph nodes	2.4	6.8	3.1	2.1	3.4	2.7	4.6	1.4	3.7	3.0
Weighted the child	59.3	80.5	68.8	41.1	71.8	74.4	73.7	69.4	50.7	62.3
Plotted weight on growth chart	30.5	20.3	32.7	15.2	28.4	32.8	52.8	23.9	28.7	29.0
<b>Essential advice to caretaker</b>										
Give extra fluids to child	18.0	14.7	16.2	11.7	15.2	21.7	21.9	20.3	30.0	17.5
Continue feeding child	16.9	16.3	16.0	10.0	14.8	25.9	19.0	25.5	24.5	16.8
Symptoms requiring immediate return	6.4	10.8	9.6	2.6	9.3	6.2	9.5	2.8	8.6	7.0
Number of sick child observations	1,878	308	302	530	559	160	289	150	197	2,186

<sup>1</sup> Cough or difficulty breathing, diarrhea, and fever.

<sup>2</sup> Either the provider or another health worker in the facility was observed measuring the child's temperature, or the facility had a system whereby all sick children have their temperatures measured before being seen.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## Annex 1.3 Family Planning Services

**Annex Table 19 Frequency of availability of family planning services**

Among facilities offering any modern method of family planning, the percentages offering any method on the indicated number of days per week, by facility type and province

Background characteristics	Percentages of facilities where family planning <sup>1</sup> services are offered in the indicated number of days			Number of facilities offering any modern method of family planning
	1-2 days per week	3-4 days per week	5 or more days per week	
<b>Facility type</b>				
Zonal and above hospitals	12.5	4.2	83.4	5
District level hospitals	10.5	11.8	76.3	16
Private hospitals	0.9	2.3	96.8	49
PHCCs	2.4	1.5	96.1	42
HPs	1.8	0.1	97.8	775
UHCs	0.0	0.0	100.0	32
<b>Province</b>				
Province 1	2.1	1.5	96.4	157
Province 2	2.8	0.0	97.2	167
Province 3	3.5	0.1	96.4	177
Province 4	0.2	0.0	99.7	119
Province 5	0.7	0.8	98.5	135
Province 6	0.6	0.0	99.4	74
Province 7	1.9	0.8	94.0	89
National average	1.9	0.5	97.3	919

<sup>1</sup> Includes services for combined oral contraceptive pills, progestin-only injectable (Depo), implants, intrauterine contraceptive device (IUCD), the male condoms, female sterilization or male sterilization.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 20 Items for infection control during provision of family planning**

Among facilities offering any modern method of family planning, the percentages with indicated items for infection control observed to be available at the service site on the day of the survey, by facility type and province

Background characteristics	Percentages of facilities offering any modern family planning services and having items for infection control											Number of facilities offering any modern method of family planning
	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	Safety box	Needle destroyer	Waste receptacle <sup>2</sup>	Injection safety precaution guideline	All infection prevention items <sup>3</sup>	
<b>Facility type</b>												
Zonal and above hospitals	91.7	91.7	91.7	54.3	91.7	95.8	87.2	33.2	16.6	16.6	0.0	5
District level hospitals	80.3	75.0	72.4	40.8	80.3	90.8	94.7	10.5	15.8	5.3	3.9	16
Private hospitals	78.5	78.1	75.4	40.3	83.6	90.0	61.7	17.7	18.3	1.7	0.9	49
PHCCs	73.8	74.8	69.9	22.8	74.3	81.1	90.3	5.8	11.6	3.4	1.0	42
HPs	52.4	44.9	40.6	24.3	50.9	86.1	88.2	1.5	5.2	3.9	0.1	775
UHCs	53.4	36.7	34.4	35.0	50.6	79.6	91.7	0.0	0.0	3.2	0.0	32
<b>Province</b>												
Province 1	48.6	47.5	43.0	28.7	54.8	85.7	87.2	0.9	5.5	0.8	0.1	157
Province 2	44.5	32.2	27.5	15.1	38.2	83.6	81.9	0.9	4.8	0.6	0.0	167
Province 3	58.8	51.1	47.5	29.9	58.4	88.3	88.8	5.0	5.3	3.6	0.1	177
Province 4	56.1	55.9	54.6	32.1	68.7	90.8	90.4	3.2	9.1	15.3	0.2	119
Province 5	78.4	61.1	59.5	35.6	68.4	90.9	91.8	3.3	7.9	3.3	0.7	135
Province 6	51.2	56.4	45.3	23.2	49.9	83.1	84.8	3.1	5.2	4.1	0.6	74
Province 7	49.9	40.5	35.5	12.5	39.5	75.0	83.4	4.5	7.0	1.3	0.2	89
National average	55.5	48.5	44.4	25.9	54.4	86.0	87.1	2.9	6.3	3.9	0.2	919

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

<sup>2</sup> Waste receptacle with plastic bin liner.

<sup>3</sup> All infection precaution items include: soap and running water or else alcohol-based hand disinfectant, latex gloves, waste receptacle with plastic bin liner, safety box or needle destroyer, and injection safety precaution guideline.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data



**Annex Table 21 Client history and physical examinations for first-visit female family planning clients**

Among female first-visit family planning clients whose consultations were observed, the percentages whose consultations included the collection of the indicated client history items and the indicated examinations, by managing authority and province

Components of consultation	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
<b>Client history</b>										
Age	55.4	13.5	45.4	12.4	69.6	58.3	47.6	59.9	65.7	54.0
Any history of pregnancy	56.3	39.7	43.1	49.2	57.2	100.0	78.3	47.2	57.5	55.8
Current pregnancy status	54.5	24.4	40.8	49.9	58.7	79.2	63.9	49.5	53.0	53.4
Breastfeeding status (if ever pregnant) <sup>1</sup>	9.9	0.0	1.2	2.7	17.2	58.3	0.0	11.0	14.1	9.6
Desired timing for next child or desire for another child	17.3	5.8	9.5	7.3	12.7	0.0	18.1	30.4	34.8	16.9
Regularity of menstrual cycle	51.4	24.4	36.3	36.2	46.6	41.7	70.0	72.0	59.0	50.5
All elements of reproductive history <sup>2</sup>	1.9	0.0	0.0	0.0	0.0	0.0	0.0	11.0	5.8	1.9
<b>Client medical history</b>										
Asked about smoking	3.1	0.0	5.0	0.0	0.0	0.0	8.0	11.0	0.0	3.0
Asked about symptoms of sexually transmitted infections (STIs)	4.5	0.0	0.0	0.0	4.0	0.0	8.6	0.0	13.4	4.3
Asked about any chronic illnesses	19.4	0.0	16.1	0.0	20.2	0.0	44.5	2.2	23.8	18.8
<b>Client examination</b>										
Measure blood pressure <sup>4</sup>	65.4	62.0	72.8	56.1	76.5	58.3	73.1	51.4	40.3	65.2
Measure weight <sup>5</sup>	56.6	62.0	66.2	27.4	67.0	58.3	70.4	51.4	37.1	56.8
<b>Questions or concerns</b>										
Asked if client had questions or concerns regarding current or past method used	30.5	13.5	31.1	12.5	18.4	37.5	43.5	51.2	42.6	30.0
Number of observed first-visit FP clients	142	5	28	17	47	1	18	14	21	147
Number of observed first-visit FP clients with prior pregnancy <sup>6</sup>	140	5	28	17	47	1	18	14	20	145

<sup>1</sup> The denominator for this indicator is the number of first-visit family planning clients with prior pregnancy. See also footnote 6.

<sup>2</sup> The client was asked about age, any history of pregnancy, current pregnancy status, desired timing for next child or desire for another child, breastfeeding status if ever pregnant, and regularity of menstrual cycle.

<sup>3</sup> The client was asked about smoking, symptoms of STIs, and any chronic illness.

<sup>4</sup> Blood pressure was measured during the consultation, or the facility had a system whereby blood pressure is routinely measured for all family planning clients before the consultation.

<sup>5</sup> Weight measured during consultation, or the facility had a system whereby weight is routinely measured for all family planning clients before the consultation.

<sup>6</sup> Applies only to the indicator "breastfeeding status".

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 22 Components of counselling and discussions during consultations for female first-visit family planning clients**

Among female first-visit family planning clients whose consultation was observed, the percentages whose consultation included the indicated components and the indicated discussions related to their partners, to sexually transmitted infections (STIs), and to condoms, by managing authority and province

Components of consultation	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
<b>Discussion related to partner</b>										
Partner's attitude toward family planning	10.4	0.0	1.7	0.0	8.0	0.0	10.2	25.3	24.6	10.1
Partner's status <sup>1</sup>	3.1	0.0	1.2	0.0	0.8	0.0	15.0	2.2	2.9	3.0
<b>Privacy and confidentiality</b>										
Visual privacy assured	46.6	66.1	35.4	17.0	72.8	62.5	38.6	63.7	25.9	47.2
Auditory privacy assured	37.2	66.1	26.0	15.0	54.4	62.5	32.7	63.7	23.1	38.1
Confidentiality assured	9.4	13.5	0.0	7.0	16.7	37.5	6.3	21.1	1.8	9.5
All three counselling conditions on privacy and confidentiality met <sup>2</sup>	8.0	13.5	0.0	7.0	13.4	0.0	6.3	21.1	1.8	8.2
<b>Discussion related to STIs and condoms</b>										
Use of condoms to prevent STIs	0.8	0.0	0.0	0.0	0.0	0.0	2.6	0.0	2.9	0.7
Use of condoms as dual method <sup>3</sup>	2.4	0.0	0.0	0.0	0.0	0.0	2.6	21.1	0.0	2.3
Any discussion related to STIs <sup>4</sup>	6.9	0.0	0.0	0.0	4.0	0.0	8.6	21.1	16.3	6.7
<b>Individual client cards</b>										
Individual client card reviewed during consultation	65.1	30.2	82.0	67.8	51.7	100.0	56.7	70.8	64.2	64.0
Individual client card written on after consultation	90.5	85.4	97.2	83.4	89.1	100.0	98.6	74.7	91.7	90.3
<b>Visual aid and return visit</b>										
Visual aids were used during consultation	15.4	5.8	10.3	0.0	13.5	37.5	20.9	15.5	30.3	15.1
Return visit discussed	66.4	72.9	75.5	47.4	79.3	58.3	74.8	49.4	46.6	66.6
<b>Concerns, side effects and individual client cards</b>										
Concerns about methods discussed <sup>5</sup>	41.7	18.6	34.0	14.4	30.7	79.2	75.1	55.6	53.0	40.9
Side effects discussed <sup>6</sup>	22.0	18.6	22.5	3.9	15.1	79.2	46.6	21.3	26.5	21.9
Number of observed first-visit FP clients	142	5	28	17	47	1	18	14	21	147

<sup>1</sup> Provider asked client about the number of client's sexual partners, or if client's partner has other sexual partners, or asked about periods of absence of sexual partner.

<sup>2</sup> Visual and auditory privacy and confidentiality assured during consultation.

<sup>3</sup> Use of condoms to prevent both pregnancy and sexually transmitted infections (STIs).

<sup>4</sup> Discussed risk of STIs, using condoms to prevent STIs, or using condoms as dual method or asked client about presence of any symptoms of STI, e.g., abnormal vaginal discharge.

<sup>5</sup> Provider asked client about concerns with family planning method.

<sup>6</sup> Method-specific side effects discussed with client, if client was provided or prescribed a method.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 23 Components of counselling and discussions during consultations for all female family planning clients**

Among all female family planning clients whose consultations were observed, the percentages whose consultation included the indicated components and the indicated discussions related to sexually transmitted infections (STIs) and condoms, by managing authority and province

Components of consultation	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
<b>Privacy and confidentiality</b>										
Visual privacy assured	47.0	80.6	47.7	40.5	55.0	39.0	34.9	72.5	48.6	47.8
Auditory privacy assured	39.3	67.8	44.0	34.7	42.1	35.1	28.4	62.8	43.3	39.9
Confidentiality assured	7.3	3.9	4.9	2.1	11.4	1.3	9.7	24.9	1.4	7.3
All three counselling conditions on privacy and confidentiality met <sup>2</sup>	6.0	3.9	4.7	1.6	10.2	0.4	4.1	24.9	1.4	6.0
<b>Discussion related to STIs and condoms</b>										
Use of condoms to prevent STIs	0.1	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.9	0.1
Use of condoms as dual method <sup>3</sup>	1.2	0.0	0.2	0.0	2.1	0.0	0.5	11.8	0.0	1.2
Any discussion related to STIs <sup>4</sup>	1.3	0.0	0.2	0.0	2.1	0.0	0.5	11.8	0.9	1.3
<b>Concerns, side effects and individual client cards</b>										
Concerns about methods discussed <sup>4</sup>	32.5	30.2	32.6	22.1	29.7	27.6	43.9	43.7	46.2	32.4
Side effects discussed <sup>5</sup>	23.1	30.2	25.2	13.8	22.6	25.9	26.1	22.3	32.9	23.2
Individual client card reviewed during consultation	66.7	46.8	84.7	57.2	59.6	67.7	71.5	62.1	63.4	66.3
Individual client card written on after consultation	83.4	91.5	91.5	82.5	81.8	63.8	93.2	77.1	82.5	83.6
<b>Visual aid and return visit</b>										
Visual aids were used during consultation	5.8	6.6	5.3	0.4	5.5	1.3	9.3	10.8	15.4	5.8
Return visit discussed	61.9	48.2	60.8	62.8	66.7	55.9	53.4	46.4	62.5	61.6
Number of observed female FP clients	751	17	143	125	261	57	88	24	69	768

<sup>1</sup> Visual and auditory privacy and confidentiality assured during consultation.

<sup>2</sup> Use of condoms to prevent both pregnancy and sexually transmitted infections (STIs).

<sup>3</sup> Discussed risks of STIs, using condoms to prevent STIs, or using condoms as dual method.

<sup>4</sup> Provider asked client about concerns with family planning method.

<sup>5</sup> Method-specific side effect discussed with client, if client was provided or prescribed a method.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## Annex 1.4 Antenatal Care

**Annex Table 24** 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 facility type and province

Background characteristics	Percentages of facilities offering ANC that have items for infection control											Number of facilities offering ANC services
	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	Safety box	Needle destroyer	Waste receptacle <sup>2</sup>	Injection safety precaution guideline	All infection prevention items <sup>3</sup>	
<b>Facility type</b>												
Zonal and above hospitals	80.9	84.6	80.9	59.7	96.3	96.3	73.3	25.7	3.7	11.0	0.0	6
District level hospitals	75.3	72.6	68.5	42.5	79.5	87.7	95.9	11.0	15.1	5.5	2.7	15
Private hospitals	80.2	81.3	79.2	44.6	86.5	89.6	50.6	17.4	18.4	1.7	1.4	60
PHCCs	72.8	73.8	69.0	24.7	73.8	80.6	90.3	6.3	11.2	3.4	1.0	42
HPs	51.2	45.0	39.9	23.1	49.0	84.5	87.3	1.6	5.6	4.3	0.1	765
UHCs	51.8	34.5	32.2	36.1	48.9	82.2	89.1	0.0	0.0	3.4	0.0	31
<b>Province</b>												
Province 1	46.3	45.2	40.8	27.0	52.0	83.6	86.7	1.6	5.8	0.8	0.1	160
Province 2	43.5	31.6	26.6	16.8	37.6	83.3	81.2	0.9	4.9	1.6	0.0	161
Province 3	57.8	52.3	48.8	32.6	60.5	87.2	84.3	5.2	7.2	3.5	0.1	183
Province 4	57.0	60.1	55.2	29.5	66.2	89.8	86.3	3.4	8.8	15.5	0.2	118
Province 5	74.0	60.4	56.0	30.0	61.5	85.6	88.7	3.3	7.9	4.1	0.9	135
Province 6	54.4	57.5	49.1	26.0	52.9	83.3	84.4	3.1	4.9	4.1	0.6	74
Province 7	51.3	41.8	37.1	12.2	41.3	77.3	85.4	4.3	7.0	1.3	0.2	89
National average	54.7	49.0	44.3	25.6	53.4	84.7	85.2	3.1	6.6	4.2	0.3	919

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

<sup>2</sup> Waste receptacle with plastic bin liner.

<sup>3</sup> All infection precaution items include: soap and running water or else alcohol-based hand disinfectant, latex gloves, sharps container or needle destroyer, waste receptacle with plastic bin liner, and injection safety precaution guideline.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 25** Characteristics of observed antenatal care clients

Among antenatal care (ANC) clients whose consultations were observed, the percentages making a first or a follow-up ANC visit, the percentages for whom this was their first pregnancy, and the percent distribution by estimated gestational status, by facility type and province

Background characteristics	Percentages of ANC clients making:		Percentages of ANC clients for whom this was first pregnancy	Gestational age				Total percent	Number of observed ANC clients
	First ANC visit for this pregnancy	Follow-up visit for this pregnancy		First trimester (<13 weeks)	Second trimester (13-26 weeks)	Third trimester (27-42 weeks)	Missing		
<b>Facility type</b>									
Zonal and above hospitals	30.3	69.7	46.2	4.7	45.6	49.4	0.3	100.0	176
District level hospitals	37.5	62.5	49.2	6.8	40.4	52.7	0.0	100.0	247
Private hospitals	25.2	74.8	52.7	6.7	43.8	49.5	0.0	100.0	292
PHCCs	48.3	51.7	46.5	6.3	48.7	44.9	0.1	100.0	172
HPs	35.7	64.3	48.3	9.8	41.3	48.4	0.4	100.0	610
UHCs	41.3	58.7	31.0	0.0	72.2	27.8	0.0	100.0	5
<b>Province</b>									
Province 1	34.0	66.0	51.4	9.6	47.0	43.4	0.0	100.0	261
Province 2	50.0	50.0	40.7	8.7	43.2	48.1	0.0	100.0	309
Province 3	24.4	75.6	54.1	7.0	43.5	49.5	0.0	100.0	476
Province 4	29.2	70.8	63.0	2.1	42.2	55.7	0.0	100.0	83
Province 5	37.3	62.7	46.5	5.8	42.4	51.8	0.0	100.0	224
Province 6	38.2	61.8	22.4	8.4	28.4	57.1	6.0	100.0	53
Province 7	36.6	63.4	49.3	11.4	40.8	47.8	0.0	100.0	96
National average	34.8	65.2	48.8	7.7	43.1	49.0	0.2	100.0	1,502

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 26 General assessment and client history for observed first-visit antenatal care clients**

Among all first-visit antenatal care (ANC) clients whose consultations were observed, the percentages for whom the consultation included the collection of the indicated client history items and routine tests and, among first-visit ANC clients with a prior pregnancy, the percentages whose consultation included the indicated client history items related to prior pregnancy, by managing authority and province

Components of consultation	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
<b>Client history</b>										
Client's age	52.7	58.5	46.2	49.3	58.9	80.3	49.9	77.8	49.2	53.5
Date of last menstrual period	77.3	79.5	73.9	68.5	84.6	98.2	80.9	85.2	77.3	77.6
Any prior pregnancy <sup>1</sup>	61.2	75.3	65.9	45.5	65.8	79.3	77.1	75.9	74.0	63.2
Medicines client currently taking	10.1	21.0	15.9	2.4	21.0	5.3	7.3	29.5	14.6	11.6
All elements relevant to client history <sup>2</sup>	4.7	17.5	14.3	0.5	8.3	5.3	0.9	26.8	9.5	6.5
<b>Routine tests</b>										
Urine protein or glucose test	38.2	55.1	39.3	35.7	54.7	39.2	35.7	34.2	35.2	40.6
Hemoglobin test	41.4	49.6	34.5	33.2	56.3	64.1	44.4	37.0	41.8	42.5
Number of first-visit ANC clients	449	73	89	154	116	24	84	20	35	523
<b>Prior pregnancy-related complications</b>										
Stillbirth	10.3	12.1	6.6	8.2	14.3	14.1	8.3	24.3	14.1	10.5
Death of infant during first week after birth	2.0	2.1	1.8	0.0	0.0	2.6	1.4	18.0	6.8	2.0
Heavy bleeding during labor or postpartum	1.2	1.5	1.7	0.0	4.2	2.6	0.4	0.0	0.0	1.2
Assisted delivery	5.3	3.3	8.4	0.0	10.2	2.6	9.1	0.0	6.3	5.0
Cesarean delivery	9.0	30.6	23.1	9.7	19.6	5.1	5.2	0.0	7.3	12.0
Previous spontaneous abortion	13.3	18.0	10.7	4.0	26.4	22.8	9.1	31.9	32.5	13.9
Previous induced abortion	4.8	31.4	19.1	0.0	18.2	8.9	0.5	17.1	12.5	8.5
Multiple pregnancies	2.1	0.0	2.6	0.0	1.9	5.6	0.0	0.0	13.4	1.8
Prolonged labor	2.3	2.0	3.4	0.0	1.2	0.0	4.5	15.8	0.0	2.3
Pregnancy-induced hypertension	0.7	4.1	2.6	0.4	1.2	2.6	0.0	1.2	2.9	1.2
Pregnancy-related convulsions	0.9	1.0	0.0	0.0	0.9	0.0	4.5	1.2	0.0	0.9
Any aspect of complications during a prior pregnancy	33.0	53.7	43.0	18.1	51.2	38.7	30.3	69.2	56.7	35.9
Number of first-visit ANC clients with prior pregnancy	254	40	49	100	50	17	45	16	17	294

<sup>1</sup> This includes any questions that would indicate whether the client has had a prior pregnancy, such as date when last menstruation started.

<sup>2</sup> Client's age, last menstrual period, medicines, and questions to determine if there has been a prior pregnancy.

<sup>3</sup> A provider performed the test as part of the visit, referred client for the test elsewhere, or provider looked at a test result during the visit on the day of the survey.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 27 Basic physical examinations and preventive interventions for antenatal care clients**

Among antenatal care (ANC) clients whose consultations were observed, the percentages for whom the consultation included the indicated physical examinations and the indicated preventive interventions, according to ANC visit status, by managing authority and province

Components of consultation	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
<b>FIRST VISIT ANC CLIENT</b>										
<b>Basic physical examination</b>										
Measured blood pressure	92.5	72.9	88.6	90.8	82.2	100.0	95.3	86.1	95.2	89.8
Weighed client	83.6	69.8	77.4	76.6	78.6	100.0	91.7	86.1	85.4	81.7
Checked fetal position (at least 8m pregnant)	82.8	73.0	89.2	79.7	84.6	100.0	77.4	85.2	58.0	80.2
Checked uterine/fundal height <sup>1</sup>	32.5	78.9	37.1	25.5	47.8	63.9	43.5	47.9	41.2	39.0
Listened to fetal heart (at least 5m pregnant) <sup>2</sup>	83.9	97.6	69.8	82.3	87.8	95.5	94.5	100.0	87.4	85.7
<b>Preventive interventions</b>										
Provider gave or prescribed iron or folic acid tablets	74.9	47.9	64.6	68.7	74.3	85.2	80.4	66.7	58.3	71.1
Provider explained purpose of iron or folic acid tablets	27.4	18.3	39.0	24.7	19.2	11.1	22.1	32.4	38.8	26.1
Provider explained how to take tablets	34.2	7.4	35.4	32.0	17.7	31.0	36.8	45.2	29.6	30.5
Provider gave or prescribed tetanus toxoid vaccine	34.0	14.0	29.6	10.6	39.6	42.5	50.9	40.7	37.6	31.2
Provider explained purpose of tetanus toxoid vaccine	17.0	6.8	15.6	14.5	13.8	5.8	16.9	14.8	29.9	15.6
Provider gave or prescribed albendazole	53.4	5.2	40.3	52.0	36.7	66.6	49.4	48.9	49.7	46.6
Provider explained purpose of albendazole	10.8	0.9	13.7	12.0	7.3	4.4	4.1	1.0	15.9	9.4
Number of ANC clients	449	73	89	154	116	24	84	20	35	523
<b>FOLLOW-UP VISIT ANC CLIENT</b>										
<b>Basic physical examination</b>										
Measured blood pressure	88.0	75.4	76.0	89.5	83.1	97.9	91.7	81.9	86.8	85.2
Weighed client	84.4	71.8	74.3	82.0	82.5	76.9	86.0	91.4	85.1	81.6
Checked fetal position (at least 8m pregnant)	86.6	91.1	94.1	84.8	92.7	89.3	74.4	94.4	72.3	87.5
Checked uterine/fundal height <sup>1</sup>	48.7	65.2	55.7	34.1	58.6	65.1	54.7	47.1	37.7	52.4
Listened to fetal heart (at least 5m pregnant) <sup>2</sup>	91.9	92.9	96.0	93.4	90.1	96.4	89.4	92.2	90.2	92.1
<b>Preventive interventions</b>										
Provider gave or prescribed iron or folic acid tablets	61.5	45.9	68.4	62.6	52.0	69.7	60.5	40.0	44.7	58.0
Provider explained purpose of iron or folic acid tablets	13.3	11.4	19.2	12.2	9.2	10.7	15.2	2.9	21.1	12.9
Provider explained how to take tablets	14.6	4.8	19.7	17.0	9.6	8.8	10.1	12.7	6.0	12.4
Provider gave or prescribed tetanus toxoid vaccine	16.3	19.7	23.8	4.7	21.0	25.6	12.2	2.9	17.1	17.1
Provider explained purpose of tetanus toxoid vaccine	5.9	6.0	6.4	3.4	7.6	3.3	5.1	0.6	7.8	5.9
Provider gave or prescribed albendazole	5.7	2.2	7.3	8.0	3.1	12.7	1.5	5.0	2.2	4.9
Provider explained purpose of albendazole	2.2	1.0	1.2	0.3	2.9	1.8	0.9	0.0	5.6	1.9
Number of ANC clients	761	218	172	155	359	59	140	33	61	980

(Continued...)

Annex Table 27—Continued

Components of consultation	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
ALL OBSERVED ANC CLIENTS										
<b>Basic physical examination</b>										
Measured blood pressure	89.7	74.8	80.2	90.2	82.9	98.5	93.1	83.6	89.9	86.8
Weighed client	84.1	71.3	75.3	79.3	81.6	83.7	88.1	89.3	85.2	81.6
Checked fetal position (at least 8m pregnant)	86.2	88.6	93.7	84.1	91.9	89.8	74.7	94.0	69.6	86.7
Checked uterine/fundal height <sup>1</sup>	42.7	68.6	49.4	29.8	56.0	64.7	50.5	47.4	39.0	47.7
Listened to fetal heart (at least 5m pregnant) <sup>2</sup>	90.2	93.5	92.9	89.5	89.8	96.3	90.6	93.5	89.7	90.9
<b>Preventive interventions</b>										
Provider gave or prescribed iron or folic acid tablets	66.5	46.4	67.1	65.7	57.5	74.2	67.9	50.2	49.7	62.6
Provider explained purpose of iron or folic acid tablets	18.5	13.1	25.9	18.4	11.6	10.8	17.8	14.2	27.6	17.5
Provider explained how to take tablets	21.9	5.5	25.0	24.5	11.6	15.3	20.1	25.1	14.6	18.7
Provider gave or prescribed tetanus toxoid vaccine	22.9	18.3	25.8	7.7	25.6	30.5	26.6	17.3	24.6	22.0
Provider explained purpose of tetanus toxoid vaccine	10.0	6.2	9.5	8.9	9.1	4.0	9.5	6.0	15.9	9.3
Provider gave or prescribed albendazole	23.4	2.9	18.5	30.0	11.3	28.5	19.4	21.8	19.6	19.4
Provider explained purpose of albendazole	5.4	1.0	5.4	6.1	4.0	2.6	2.1	0.4	9.4	4.5
Number of ANC clients	1,211	292	261	309	476	83	224	53	96	1,502

Note: See Table 6.18 for information on insecticide-treated mosquito bed nets (ITNs).

<sup>1</sup> Either by palpating the client's abdomen or by using an ultrasound device to assess gestational age of fetus, or by using a tape measure to measure the fundal height.

<sup>2</sup> Either with a fetal stethoscope or by using an ultrasound device.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 28 Content of antenatal care counselling related to risk symptoms**

Among antenatal care (ANC) clients whose consultations were observed, the percentages whose consultation included mention of and/or counselling on topics related to indicated risk symptoms, according to ANC visit status, by managing authority and province

Counselling topics	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
<b>FIRST VISIT ANC CLIENT</b>										
Vaginal bleeding or spotting	22.0	37.6	18.0	12.9	36.7	22.3	25.8	58.3	26.1	24.2
Fever	7.8	4.9	11.0	0.8	13.5	21.8	2.1	0.9	13.8	7.4
Headache or blurred vision	20.4	31.5	31.5	5.8	28.7	42.3	18.3	41.6	29.3	21.9
Swollen hands, face or body	19.9	16.6	26.0	7.8	27.9	6.5	21.4	37.2	19.4	19.4
Tiredness, shortness of breath	2.9	5.3	1.4	1.3	5.7	8.4	2.2	2.7	7.5	3.3
Fetal movement: loss of, excessive or normal	17.2	25.8	9.7	10.7	30.6	20.6	16.6	44.3	21.5	18.4
Convulsion or loss of consciousness	10.0	2.2	13.0	2.5	6.6	3.9	16.3	22.3	12.5	8.9
Severe lower abdominal pain	35.8	49.9	42.8	20.1	45.7	45.4	45.0	58.5	41.8	37.8
Any of the above risk symptoms	57.5	62.8	70.0	35.3	67.7	63.6	61.9	91.9	65.7	58.2
All of the above symptoms	0.8	0.0	0.0	0.0	1.3	0.0	0.0	0.0	5.4	0.7
Number of ANC clients	449	73	89	154	116	24	84	20	35	523
<b>FOLLOW-UP VISIT ANC CLIENT</b>										
Vaginal bleeding or spotting	43.0	58.0	50.8	26.9	54.8	45.5	40.8	59.1	39.1	46.3
Fever	5.3	11.3	8.9	0.0	8.9	2.1	7.5	2.9	7.5	6.6
Headache or blurred vision	22.5	36.1	31.2	11.4	26.8	22.2	28.5	43.1	23.9	25.5
Swollen hands, face or body	24.3	25.2	16.7	14.3	30.1	24.9	31.9	26.9	21.0	24.5
Tiredness, shortness of breath	6.2	7.8	8.0	3.6	5.7	1.8	5.8	18.9	14.7	6.6
Fetal movement: loss of, excessive or normal	38.9	49.2	49.2	21.9	48.5	39.6	34.9	46.4	37.7	41.2
Convulsion or loss of consciousness	6.0	5.5	1.9	0.5	6.4	5.2	12.0	23.6	4.5	5.9
Severe lower abdominal pain	39.9	56.9	36.3	27.4	48.6	49.6	49.7	76.1	40.6	43.7
Any of the above risk symptoms	67.1	85.0	73.2	45.2	78.4	63.2	77.9	96.0	66.7	71.1
All of the above symptoms	0.1	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.1
Number of ANC clients	761	218	172	155	359	59	140	33	61	980
<b>ALL OBSERVED ANC CLIENTS</b>										
Vaginal bleeding or spotting	35.2	52.9	39.7	19.9	50.4	38.7	35.2	58.8	34.4	38.6
Fever	6.2	9.7	9.6	0.4	10.1	7.9	5.5	2.2	9.8	6.9
Headache or blurred vision	21.7	35.0	31.3	8.6	27.3	28.1	24.7	42.5	25.9	24.3
Swollen hands, face or body	22.7	23.0	19.8	11.1	29.6	19.5	28.0	30.9	20.4	22.7
Tiredness, shortness of breath	5.0	7.2	5.8	2.5	5.7	3.7	4.5	12.7	12.1	5.4
Fetal movement: loss of, excessive or normal	30.9	43.3	35.8	16.3	44.1	34.0	28.0	45.6	31.8	33.3
Convulsion or loss of consciousness	7.5	4.7	5.6	1.5	6.4	4.8	13.6	23.1	7.4	6.9
Severe lower abdominal pain	38.4	55.1	38.5	23.8	47.9	48.4	47.9	69.4	41.0	41.6
Any of the above risk symptoms	63.5	79.4	72.1	40.3	75.8	63.3	71.9	94.4	66.3	66.6
All of the above symptoms	0.4	0.0	0.0	0.0	0.3	0.0	0.5	0.0	2.0	0.3
Number of ANC clients	1,211	292	261	309	476	83	224	53	96	1,502

Source: MoHP, ICF and Abt analysis of 2015 NHFS data



**Annex Table 29 Content of antenatal care counselling related to risk symptoms**

Among antenatal care (ANC) clients whose consultations were observed, the percentages whose consultation included counselling on topics related to indicated risk symptoms, according to ANC visit status, by managing authority and province

Counselling topics	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
<b>FIRST VISIT ANC CLIENT</b>										
Vaginal bleeding or spotting	1.2	5.9	3.7	0.5	4.1	1.3	0.0	0.0	1.5	1.9
Fever	1.1	0.8	1.4	0.0	2.0	1.3	0.0	0.0	5.4	1.1
Headache or blurred vision	2.8	0.0	1.7	0.0	7.3	1.3	0.0	0.0	6.2	2.4
Swollen hands, face or body	2.7	2.0	6.3	0.3	2.4	3.0	0.2	5.7	8.3	2.6
Tiredness, shortness of breath	1.1	0.0	0.0	0.3	0.3	1.3	2.2	0.0	6.2	1.0
Fetal movement: loss of, excessive or normal	2.5	1.5	1.7	1.0	2.2	1.3	4.0	0.0	9.3	2.4
Any of the above risk symptoms	7.7	9.1	13.0	1.8	13.5	3.0	6.2	5.7	12.2	7.9
All of the above symptoms	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.4
Number of ANC clients	449	73	89	154	116	24	84	20	35	523
<b>FOLLOW-UP VISIT ANC CLIENT</b>										
Vaginal bleeding or spotting	1.2	2.7	1.1	0.0	2.9	0.5	0.5	0.0	3.1	1.6
Fever	1.0	1.7	2.0	0.0	1.6	0.0	0.2	0.0	3.1	1.2
Headache or blurred vision	3.8	0.2	2.3	4.8	3.5	0.5	1.6	0.0	4.4	3.0
Swollen hands, face or body	6.9	7.7	6.8	5.3	9.6	2.1	7.5	0.0	4.5	7.0
Tiredness, shortness of breath	0.8	0.4	0.0	1.5	0.5	0.7	0.3	0.0	2.9	0.7
Fetal movement: loss of, excessive or normal	7.2	3.1	5.7	5.2	8.1	0.7	3.3	8.5	11.5	6.3
Any of the above risk symptoms	15.0	13.2	12.5	12.2	19.6	4.1	12.5	8.5	14.9	14.6
All of the above symptoms	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	3.1	0.2
Number of ANC clients	761	218	172	155	359	59	140	33	61	980
<b>ALL OBSERVED ANC CLIENTS</b>										
Vaginal bleeding or spotting	1.2	3.5	2.0	0.3	3.2	0.7	0.3	0.0	2.5	1.7
Fever	1.1	1.5	1.8	0.0	1.7	0.4	0.1	0.0	4.0	1.1
Headache or blurred vision	3.4	0.2	2.1	2.4	4.4	0.7	1.0	0.0	5.1	2.8
Swollen hands, face or body	5.3	6.2	6.7	2.8	7.8	2.4	4.8	2.2	5.9	5.5
Tiredness, shortness of breath	0.9	0.3	0.0	0.9	0.4	0.9	1.0	0.0	4.1	0.8
Fetal movement: loss of, excessive or normal	5.5	2.7	4.3	3.1	6.6	0.9	3.5	5.3	10.7	4.9
Any of the above risk symptoms	12.3	12.2	12.7	7.0	18.1	3.8	10.2	7.5	13.9	12.3
All of the above symptoms	0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.0	4.0	0.3
Number of ANC clients	1,211	292	261	309	476	83	224	53	96	1,502

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 30 Content of antenatal care counselling related to nutrition, breastfeeding, and family planning**

Among antenatal care (ANC) clients whose consultations were observed, the percentages whose consultation included mention and/or counselling on topics related to nutrition during pregnancy, progress of the pregnancy, delivery plans, exclusive breastfeeding, and family planning after birth, according to ANC visit status, by managing authority and province

Counselling topics	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
<b>FIRST VISIT ANC CLIENT</b>										
Nutrition	57.8	24.1	49.1	48.1	49.4	35.7	69.9	41.3	75.2	53.0
Progress of pregnancy	21.8	39.4	22.3	23.1	29.8	27.4	25.5	3.8	23.4	24.3
Importance of at least 4 ANC visits	33.3	14.1	25.2	23.4	27.2	36.8	49.7	43.3	29.6	30.6
Delivery plans										
Birth preparedness <sup>1</sup>	13.7	6.5	14.5	8.2	8.1	10.0	23.1	19.7	16.1	12.7
Care of newborn <sup>2</sup>	1.6	0.0	4.7	0.0	0.7	4.4	0.0	0.0	2.6	1.3
Early initiation and prolonged breastfeeding	1.6	2.2	4.7	0.0	2.1	4.4	0.0	0.0	2.6	1.6
Exclusive breastfeeding	0.8	2.2	1.1	0.3	2.4	0.0	1.1	0.0	0.0	1.0
Importance of vaccination for newborn	0.9	0.0	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Family planning post-partum	1.5	0.4	4.2	0.0	0.0	0.0	2.1	0.0	5.0	1.4
Provider used any visual aids	8.8	2.9	11.3	2.5	8.5	20.5	7.3	14.0	10.4	7.9
Number of ANC clients	449	73	89	154	116	24	84	20	35	523
<b>FOLLOW-UP VISIT ANC CLIENT</b>										
Nutrition	50.8	27.8	43.6	47.6	38.9	43.6	59.7	46.5	56.3	45.7
Progress of pregnancy	33.4	48.3	38.5	26.1	41.8	30.6	41.9	25.1	29.4	36.7
Importance of at least 4 ANC visits	15.0	3.0	17.1	9.3	7.4	6.6	23.6	9.9	16.5	12.3
Delivery plans										
Birth preparedness <sup>1</sup>	21.0	14.1	14.7	19.8	15.7	27.6	24.4	36.2	26.2	19.5
Care of newborn <sup>2</sup>	0.4	0.0	0.0	1.0	0.0	0.0	1.1	0.0	0.0	0.3
Early initiation and prolonged breastfeeding	1.3	1.5	0.5	1.0	2.4	0.0	1.1	0.0	0.9	1.3
Exclusive breastfeeding	1.1	0.0	0.6	1.0	1.5	0.0	0.0	0.0	0.9	0.9
Importance of vaccination for newborn	0.4	0.0	0.0	1.0	0.0	0.0	1.1	0.0	0.0	0.3
Family planning post-partum	1.2	0.0	0.0	0.0	2.1	0.0	1.2	0.0	0.0	1.0
Provider used any visual aids	6.2	0.8	4.3	2.3	2.5	0.0	9.4	30.4	8.9	5.0
Number of ANC clients	761	218	172	155	359	59	140	33	61	980
<b>ALL OBSERVED ANC CLIENTS</b>										
Nutrition	53.4	26.9	45.5	47.9	41.5	41.3	63.5	44.5	63.2	48.3
Progress of pregnancy	29.1	46.1	33.0	24.6	38.8	29.7	35.8	17.0	27.2	32.4
Importance of at least 4 ANC visits	21.8	5.8	19.9	16.4	12.2	15.4	33.4	22.7	21.3	18.7
Delivery plans										
Birth preparedness <sup>1</sup>	18.3	12.2	14.6	14.0	13.8	22.4	23.9	29.9	22.5	17.1
Care of newborn <sup>2</sup>	0.8	0.0	1.6	0.5	0.2	1.3	0.7	0.0	1.0	0.7
Early initiation and prolonged breastfeeding	1.4	1.6	1.9	0.5	2.3	1.3	0.7	0.0	1.5	1.4
Exclusive breastfeeding	1.0	0.5	0.8	0.6	1.7	0.0	0.4	0.0	0.6	0.9
Importance of vaccination for newborn	0.6	0.0	1.6	0.5	0.0	0.0	0.7	0.0	0.0	0.5
Family planning post-partum	1.3	0.1	1.4	0.0	1.6	0.0	1.6	0.0	1.8	1.1
Provider used any visual aids	7.1	1.3	6.7	2.4	3.9	6.0	8.7	24.1	9.5	6.0
Number of ANC clients	1,211	292	261	309	476	83	224	53	96	1,502

<sup>1</sup> Provider advised or counselled client about birth preparedness in any of the following ways: asked client where she plans to deliver and advised client to prepare for delivery by setting aside money, making arrangements for transportation, identifying a blood donor; advised client to use a skilled birth attendant or delivery at a health facility; discussed what items to have on hand at home, e.g., blade, clean delivery kit, 7.1% Chlorhexidine.

<sup>2</sup> Care for the newborn includes any discussion with the ANC client on keeping the newborn warm, general hygiene, or cord care.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 31 Antenatal care clients' reported health education received and knowledge of pregnancy-related warning signs**

Among interviewed antenatal care (ANC) clients, the percentages who said that the provider counseled them on pregnancy-related warning signs, the percentages who named specific warning signs, the percentages who reported specific actions that they were told to take if warning signs occurred, and the percentages who discussed other topics, including breastfeeding, planned place of delivery and supplies, and family planning, during this visit or a previous visit, by managing authority and province

Issues discussed during current or previous visit	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
Client reported provider discussed or counselled on any warning signs	32.2	40.5	36.1	16.5	35.4	53.4	35.7	62.3	38.9	33.8
<b>Warning signs discussed (named by client)</b>										
Vaginal bleeding	32.1	53.2	30.2	17.9	49.4	46.6	33.4	52.1	33.9	36.2
Fever	8.7	11.3	12.1	4.6	10.0	8.6	8.6	17.3	10.1	9.2
Swollen face, hands or extremities	17.4	24.1	10.2	10.9	20.0	45.2	23.7	31.0	18.6	18.7
Tiredness or breathlessness	3.3	6.6	5.7	1.4	5.1	1.6	3.2	7.1	3.3	3.9
Headache or blurred vision	16.5	16.6	18.1	12.8	17.9	13.5	12.0	37.5	18.8	16.5
Seizures/ convulsions	2.7	3.7	4.0	3.6	0.8	1.6	4.8	10.3	0.6	2.9
Reduced or absence of fetal movement	2.6	11.7	5.6	1.3	6.9	4.2	3.0	3.2	2.0	4.4
Lower abdominal pains	30.3	43.2	34.8	23.5	38.4	47.2	26.3	49.3	23.2	32.8
All warning signs	0.0	0.5	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.1
<b>Actions client told to take if warning signs occurred</b>										
Seek care at facility	68.4	78.1	52.8	59.2	81.0	81.0	76.9	83.5	68.1	70.3
Reduce physical activity	2.8	7.2	7.8	0.0	1.9	4.4	1.7	11.8	12.5	3.7
Change diet	1.2	2.3	3.1	0.0	0.1	0.0	2.7	9.2	1.5	1.4
No advice given by provider	30.3	19.6	42.5	40.8	18.4	14.2	22.2	15.9	29.6	28.2
<b>Client reported provider discussed</b>										
Importance of exclusive breastfeeding and counseled to exclusively breastfeed for 6 months	10.4	5.2	13.4	3.9	5.1	2.6	15.9	25.1	20.0	9.4
Planned place of delivery	29.6	24.5	30.2	19.7	24.3	27.3	37.8	30.0	53.4	28.6
Supplies to prepare for delivery	22.1	14.4	24.2	10.7	18.2	17.3	28.2	41.4	28.3	20.6
Using family planning after childbirth	9.8	3.9	16.9	2.7	4.1	1.6	12.4	14.8	21.4	8.6
Number of interviewed ANC clients	1,211	292	261	309	476	83	224	53	96	1,502

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 32 Malaria services in facilities offering antenatal care services**

Among facilities offering antenatal care (ANC) services, the percentages having indicated items for the provision of malaria services available on the day of the survey, by facility type and province

Background characteristics	Percentages of facilities offering antenatal care services that have:		Medicines							Diagnostics				Number of facilities offering ANC services
	Trained staff <sup>1</sup>	ITN <sup>2</sup>	ACT (Co-artem) <sup>3</sup>	Quinine tablets	Quinine injection	Prima-quine tablet <sup>3</sup>	Chloro-quine tablet <sup>3</sup>	Sulfa-doxine/pyri-methamine (SP)	Com-bined iron and folic acid tablets	Malaria RDT <sup>4</sup>	Malaria micro-scopy <sup>5</sup>	RDT or micro-scopy	Hemo-globin <sup>6</sup>	
<b>Facility type</b>														
Zonal and above														
hospitals	0.0	7.3	11.3	14.9	11.3	48.7	29.6	3.7	48.4	81.7	67.0	89.0	96.3	6
District level														
hospitals	8.2	11.0	5.5	11.0	5.5	52.1	41.1	1.4	80.8	60.3	58.9	84.9	97.3	15
Private														
hospitals	0.0	1.1	3.3	18.2	7.7	42.0	12.9	3.1	18.9	80.3	53.5	85.9	93.7	60
PHCCs	5.3	15.2	2.9	5.8	2.4	56.4	44.7	1.0	82.1	55.4	41.7	65.6	74.7	42
HPs	4.0	6.2	0.5	2.6	0.0	26.8	15.3	1.1	83.1	13.1	1.5	13.3	3.7	765
UHCs	3.7	2.0	0.0	0.0	0.0	11.6	11.7	6.4	95.5	2.3	0.0	2.3	0.0	31
<b>Province</b>														
Province 1	10.3	5.2	1.1	6.4	0.4	29.8	23.4	0.4	87.0	17.3	9.2	18.3	13.5	160
Province 2	0.4	12.8	1.1	3.7	0.0	45.5	21.8	5.2	61.2	22.0	7.0	23.0	12.3	161
Province 3	5.0	6.1	1.2	2.6	1.1	19.0	9.7	0.4	81.4	21.6	12.6	23.1	23.7	183
Province 4	0.3	0.5	0.2	3.5	2.3	17.6	10.0	0.5	82.4	14.2	4.9	16.0	12.1	118
Province 5	4.1	8.3	1.2	4.6	0.6	41.6	22.8	0.0	85.0	25.6	6.1	27.4	13.3	135
Province 6	0.3	0.6	0.0	1.9	0.3	14.2	7.9	0.0	84.7	13.2	4.5	14.3	8.6	74
Province 7	3.3	5.4	1.0	3.5	0.9	28.2	18.9	3.2	73.7	26.1	8.7	28.4	14.4	89
National average	3.9	6.2	0.9	3.9	0.8	29.2	16.9	1.4	79.0	20.3	8.1	21.8	14.8	919

Note: See chapter 6 (Table 6.1) for information on proportion of all facilities offering antenatal care services

Note: IPTp = Intermittent preventive treatment of malaria during pregnancy; SP = sulfadoxine/pyrimethamine (Fansidar)

<sup>1</sup> At least one interviewed provider of ANC services reports receiving in-service training on malaria in pregnancy 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 reports that it had ITNs in storage in the facility on the day of the survey.

<sup>3</sup> Country-recommended artemisinin combination therapy (ACT) drug for treatment of active malaria

<sup>4</sup> Facility had unexpired malaria rapid diagnostic test (RDT) kits 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 has capacity to conduct hemoglobin test using any of the following means: hematology analyzer, hemoglobinometer or colorimeter, HemoCue, or litmus paper.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## Annex 1.5 Delivery and Newborn Care

**Annex Table 33 Availability of normal vaginal delivery and other maternal health services**

Among all facilities, the percentages that offer normal vaginal delivery and cesarean delivery services, and among facilities that offer normal vaginal 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 facility type and province

Background characteristics	Percentages of facilities offering:		Percentages of facilities offering normal vaginal delivery services that offer/have:						
	Normal vaginal delivery service	Cesarean delivery	Number of facilities	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	Number of facilities offering normal vaginal delivery services
<b>Facility type</b>									
Zonal and above hospitals	84.0	87.8	5	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
UHCs	2.6	0.0	32	0.0	0.0	0.0	75.0	100.0	1
<b>Province</b>									
Province 1	47.4	4.0	164	23.5	28.7	12.5	21.5	92.7	78
Province 2	23.1	4.5	171	41.8	41.6	22.2	39.3	96.9	39
Province 3	44.6	11.1	185	25.2	29.6	23.3	30.4	82.8	82
Province 4	55.3	3.5	119	14.6	30.4	10.7	27.3	94.1	66
Province 5	45.7	3.3	138	31.3	29.3	13.0	21.3	95.2	63
Province 6	83.3	2.8	74	30.5	13.6	7.0	5.3	96.0	62
Province 7	75.4	3.0	89	21.5	12.7	7.3	22.1	87.6	67
National average	48.7	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 hospital are excluded in this and all the tables of this chapter.

Note: The total number of facilities includes 1 UHC that offers normal vaginal delivery services.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 34 Items for infection control during provision of delivery care**

Among facilities offering normal vaginal delivery services, the percentages with indicated items for infection control observed to be available at the service site on the day of the survey, by facility type and province

Background characteristics	Percentages of facilities offering normal vaginal delivery services that have items for infection control											Number of facilities offering normal vaginal delivery services
	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	Safety box	Needle destroyer	Waste receptacle <sup>2</sup>	Injection safety precaution guideline	All infection prevention items <sup>3</sup>	
<b>Facility type</b>												
Zonal and above hospitals	90.9	95.5	90.9	54.7	90.9	100.0	86.4	45.3	45.6	18.1	9.1	5
District level hospitals	90.8	88.2	86.8	51.3	92.1	97.4	94.7	15.8	31.6	5.3	2.6	16
Private hospitals	90.4	87.9	87.4	46.9	90.9	91.2	57.4	27.3	31.4	2.6	1.4	45
PHCCs	86.4	86.4	82.3	31.9	84.9	94.5	91.9	6.1	14.6	8.2	1.5	41
HPs	66.8	63.6	58.9	29.3	71.1	92.3	89.0	4.3	9.0	7.5	1.1	351
<b>Province</b>												
Province 1	69.8	63.7	61.8	29.2	69.8	96.0	87.5	3.5	11.1	1.6	0.8	78
Province 2	79.8	72.6	70.1	27.5	78.2	96.5	73.9	0.0	4.2	4.3	0.0	39
Province 3	78.3	76.1	73.9	45.9	84.2	91.1	87.9	16.0	16.4	3.9	0.0	82
Province 4	68.6	75.7	68.0	40.5	84.3	95.7	86.9	9.2	7.8	14.8	0.3	66
Province 5	84.7	74.3	74.0	40.0	85.2	95.4	90.7	10.8	20.5	11.8	1.0	63
Province 6	58.7	60.8	51.1	22.1	61.3	85.9	86.3	1.3	12.4	5.2	0.7	62
Province 7	65.4	60.8	56.3	15.4	62.0	88.3	86.1	7.0	13.7	8.7	6.1	67
National average	71.9	69.1	65.0	32.2	75.0	92.5	86.4	7.5	12.8	7.1	1.3	457

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

<sup>2</sup> Waste receptacle with plastic bin liner.

<sup>3</sup> All infection precaution items include: soap and running water or else alcohol-based hand disinfectant, latex gloves, safety box or needle destroyer, waste receptacle with plastic bin liner, and injection safety precaution guideline.

Source: Abt and ICF analysis of 2015 NHFS data

**Annex Table 35 Signal Functions for emergency obstetric and neonatal care (EmONC) and functional Basic EmONC and Comprehensive EmONC facilities**

Among facilities offering normal vaginal delivery services, percentages that reported applying or carrying out 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 facility type and province

Background characteristics	Percentages of facilities that carried out:							Number of facilities offering normal vaginal delivery services	Percentages of facilities that carried out:	Number of hospitals and PHCCs offering normal vaginal delivery services	Number of hospitals offering normal vaginal delivery services			
	Parent-eral anti-biotics	Parent-eral oxy-tocics	Parent-eral anti-convul-sant	Assisted vaginal delivery (AVD)	Manual removal of placenta	Removal of retained products of conception (MVA)	Neonatal resusc-itation					BEmON C <sup>1</sup>	Blood transfusion	Cesar-ean delivery
<b>Facility type</b>														
Zonal and above hospitals	90.9	100.0	77.0	100.0	90.9	95.1	100.0	5	67.9	5	95.5	100.0	67.9	5
District level hospitals	88.2	100.0	40.8	59.2	78.9	80.3	80.3	16	22.4	16	47.4	50.0	18.4	16
Private hospitals	72.3	79.0	31.2	34.2	53.6	43.9	48.0	45	15.7	45	50.0	59.0	13.3	45
PHCCs	51.4	93.4	9.1	19.2	52.0	43.9	53.5	41	3.0	41	-	-	-	0
HPs	32.8	84.9	5.1	10.4	38.0	27.3	30.7	351	-	0	-	-	-	0
<b>Province</b>														
Province 1	35.6	83.1	7.9	11.4	51.3	40.5	42.3	78	11.0	19	42.1	51.8	15.6	11
Province 2	64.6	95.7	27.0	35.0	54.3	44.3	54.0	39	11.9	20	51.5	61.4	18.1	12
Province 3	40.2	77.3	9.9	12.9	31.6	25.6	27.9	82	14.3	30	56.5	63.5	17.5	22
Province 4	35.5	76.0	4.1	8.7	32.4	15.5	19.1	66	5.6	11	49.5	56.0	9.9	6
Province 5	57.8	93.8	15.8	22.4	57.1	46.0	46.1	63	27.4	13	61.2	68.3	35.0	6
Province 6	28.6	85.3	5.5	16.5	34.4	23.9	43.5	62	14.3	6	50.0	50.0	12.5	3
Province 7	33.5	96.2	6.8	15.3	44.7	39.8	33.5	67	15.8	8	54.5	54.5	22.7	5
National average	40.7	85.8	10.0	16.1	42.8	33.0	36.8	457	14.0	106	52.6	59.7	18.4	65

<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 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.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 36 Districts with at least one CEmONC site**

Among all districts, percentages and number that have at least one comprehensive emergency obstetric and newborn care (CEmONC) site, by background characteristics, Nepal HFS 2015

Background characteristics	At least one facility in each district reported to be CEmONC site <sup>1</sup>		At least one facility in each district met all CEmONC criteria <sup>2</sup>		Number of districts
	Percent	Number	Percent	Number	
<b>Province</b>					
Province 1	100.0	14	50.0	7	14
Province 2	100.0	8	25.0	2	8
Province 3	76.9	10	53.8	7	13
Province 4	54.5	6	18.2	2	11
Province 5	83.3	10	50.0	6	12
Province 6	70.0	7	20.0	2	10
Province 7	88.9	8	44.4	4	9
<b>National Average</b>	<b>81.8</b>	<b>63</b>	<b>39.0</b>	<b>30</b>	<b>77</b>

<sup>1</sup> At least one facility in the district reports that it is a comprehensive emergency obstetric and newborn care site.

<sup>2</sup> At least one facility in the district reports that they conduct Cesarean deliveries and have done at least one CS in the 3 months before the survey, that do blood transfusion at the facility and have done blood transfusion in an obstetric context at least once in the past 3 months, and that each of the following interventions have been carried out at least once in the past 3 months: 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.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 37 Postpartum exit Mode of Delivery**

Among interviewed postpartum women, the percentages with mode of delivery recorded in the discharge slip, by facility type and province

Background characteristics	Mode of delivery				No. of postpartum clients
	Vaginal delivery	Forceps	Vacuum	Caesarean	
<b>Facility type</b>					
Zonal and above hospitals	68.6	1.3	3.3	26.7	94
District level hospitals	90.7	0.0	3.1	6.3	111
Private hospitals	69.0	0.0	0.6	29.9	97
PHCCs	100.0	0.0	0.0	0.0	5
HPs	100.0	0.0	0.0	0.0	2
<b>Province</b>					
Province 1	79.9	0.0	9.0	9.2	24
Province 2	84.3	0.0	0.0	15.7	46
Province 3	68.5	0.0	0.0	31.5	110
Province 4	92.5	0.0	0.0	7.5	38
Province 5	76.6	0.0	6.7	16.7	48
Province 6	79.7	0.0	2.7	17.6	19
Province 7	78.5	5.4	5.4	10.7	23
National average	77.4	0.4	2.3	19.7	309

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 38 Postpartum exit quality of care**

Among interviewed postpartum women, the percentages with the indicated items considered important for the provision of quality delivery services, by facility type and province

Background characteristics	Delivered by				Initiate breast-feeding within 1 hour	Gave any pre-lacteal feed before breast-feeding	Put chlorhexidine in umbilicus	No. of postpartum clients
	Doctor	Nurse/ANM	Male provider	Female provider				
<b>Facility type</b>								
Zonal and above hospitals	37.1	61.4	14.7	85.3	71.3	13.4	25.4	94
District level hospitals	15.0	84.6	6.0	94.0	89.0	9.9	45.8	111
Private hospitals	55.4	44.6	5.6	94.4	50.2	33.9	39.3	97
PHCCs	13.6	72.7	0.0	100.0	90.9	0.0	50.0	5
HPs	0.0	100.0	0.0	100.0	100.0	100.0	100.0	2
<b>Province</b>								
Province 1	22.5	77.5	11.3	88.7	74.8	6.1	31.8	24
Province 2	20.1	78.3	4.0	96.0	78.1	23.0	43.4	46
Province 3	57.5	41.2	7.7	92.3	57.8	26.5	26.1	110
Province 4	21.5	78.5	2.5	97.5	76.8	20.7	30.9	38
Province 5	21.4	78.6	13.5	86.5	76.2	17.5	66.3	48
Province 6	17.6	82.4	5.3	94.7	91.4	2.7	36.1	19
Province 7	24.5	73.4	19.2	80.8	87.0	0.0	44.2	23
National average	34.2	64.9	8.4	91.6	71.6	18.8	37.9	309

Source: MoHP, ICF and Abt analysis of 2015 NHFS data



**Annex Table 39 Postpartum check/advise at the time of discharge**

Among interviewed postpartum women, the percentages whose consultation included check/advise on topics related to mother and baby at the time of discharge, by managing authority and province

Type of check/advise	Managing authority		Province							National average
	Public	Private	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	
<b>Mother</b>										
Check blood pressure	75.4	93.2	84.4	57.1	95.8	87.6	82.7	85.2	35.1	81.0
Check pulse	66.6	87.0	68.0	49.6	90.7	84.7	75.2	56.9	27.6	72.9
Check temperature	45.7	82.8	62.1	27.7	76.8	61.5	56.4	39.7	26.6	57.3
Check leg for tenderness/swelling	35.7	60.1	29.2	19.1	58.0	54.9	47.2	27.3	21.3	43.3
Inspect perineum for tear, bleeding, swelling	58.9	67.2	43.0	51.0	61.0	69.0	77.6	76.6	44.9	61.5
Examine breast for retracted nipple, cracked nipple, engorgement	37.2	56.9	36.4	41.3	50.3	41.3	50.4	34.3	17.1	43.3
Ask she has passed urine without difficulties	57.5	76.5	59.1	42.0	75.3	65.8	59.8	65.1	55.8	63.4
Uterine consistency	50.3	70.8	62.3	42.8	62.7	52.2	68.5	64.3	25.5	56.7
Bleeding	60.9	81.2	65.4	45.6	70.9	84.2	67.3	86.4	50.6	67.3
Cord care advise	47.5	69.8	51.9	42.5	62.7	57.0	49.7	59.1	43.2	54.4
Breastfeeding advise	79.1	90.3	89.7	73.3	82.7	97.1	82.6	77.2	73.2	82.6
Family Planning advise	25.3	24.8	31.6	10.0	23.6	12.8	39.1	32.6	40.9	25.1
Post Natal Care (PNC) checkup advise	62.7	64.6	58.4	47.7	67.5	71.0	57.6	77.4	66.7	63.3
Carried out wound site examination	40.9	66.9	38.7	34.1	55.4	52.1	62.0	53.6	22.4	49.0
Advised on danger signs during postpartum period	32.2	51.3	44.1	17.9	44.7	41.7	43.0	35.1	27.1	38.2
All checks/advise	3.2	5.1	2.2	2.8	2.7	2.9	9.4	0.0	5.4	3.8
<b>Newborn</b>										
Check baby temperature by touching foot and abdomen	58.4	87.7	65.8	39.1	83.3	52.1	66.6	79.1	68.8	67.6
Check any difficulty in breathing, grunting, chest indrawn	54.7	85.8	54.4	44.9	81.7	57.4	50.6	76.4	61.4	64.4
Assess newborns general appearance color, movement and cry	48.8	79.5	45.1	39.7	67.9	68.6	56.8	56.4	52.3	58.4
Check umbilical cord for bleeding and infection	49.8	79.1	46.3	39.7	68.0	64.5	67.8	56.4	40.9	58.9
Check for pustules on skin	23.5	50.6	42.4	12.9	35.9	26.5	42.1	2.7	52.6	32.0
Check eye for discharge	26.5	57.5	39.6	5.6	49.8	17.0	52.0	23.8	37.4	36.2
Look for sign of jaundice in forehead, abdomen, palm, foot	37.1	71.2	34.9	19.7	65.6	50.0	55.3	10.7	42.7	47.8
Ask if newborn is breastfeeding well	80.8	93.3	85.6	72.2	86.9	95.9	82.3	97.5	73.1	84.7
Immunization	64.2	66.0	61.1	54.4	69.6	61.5	64.2	73.7	65.7	64.8
All checks/advise	9.9	35.5	9.0	2.8	27.8	12.9	24.9	0.0	18.2	17.9
No. of postpartum clients	212	97	24	46	110	38	48	19	23	309

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## Annex 1.6 HIV/AIDS and Sexually Transmitted Infections

**Annex Table 40** Items for infection control during provision of HIV testing services at the service site

Among facilities having HIV testing capacity, the percentages with indicated items for infection control observed to be available at the service site on the day of the survey, by facility type and province

Background characteristics	Percentages of facilities with HIV testing system that have items for infection control											Number of facilities having HIV testing capacity
	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	Safety box	Needle destroyer	Waste receptacle <sup>2</sup>	Injection safety precaution guideline	All infection prevention items <sup>3</sup>	
<b>Facility type</b>												
Zonal and above hospitals	31.7	31.7	31.7	9.1	31.7	31.7	27.2	9.1	4.5	4.5	0.0	5
District level hospitals	7.0	7.0	7.0	11.6	11.6	16.3	16.3	2.3	2.3	0.0	0.0	9
Private hospitals	18.4	18.4	18.4	2.6	18.4	16.1	16.1	2.6	4.9	2.6	2.6	9
PHCCs	26.1	21.7	21.7	13.0	21.7	30.4	30.4	4.3	8.7	8.7	0.0	5
HPs	53.9	35.9	35.9	53.9	53.9	53.9	18.0	0.0	0.0	0.0	0.0	4
Stand-alone HTC	50.3	50.3	50.3	25.7	51.7	49.0	48.9	43.2	21.3	13.5	5.8	15
<b>Province</b>												
Province 1	39.3	39.3	39.3	19.6	39.3	19.6	39.3	15.0	34.6	15.0	15.0	4
Province 2	41.9	41.9	41.9	18.1	41.9	41.9	19.1	7.1	7.1	0.0	0.0	8
Province 3	16.4	16.4	16.4	18.0	19.6	14.7	18.0	14.7	5.0	1.7	1.7	13
Province 4	48.1	48.1	48.1	24.4	48.1	58.0	48.1	36.6	16.0	16.0	0.0	5
Province 5	38.6	30.0	30.0	13.4	38.6	42.4	40.5	18.1	4.8	8.1	0.0	9
Province 6	30.0	30.0	30.0	30.0	30.0	30.0	30.0	20.0	10.0	10.0	0.0	2
Province 7	18.7	14.0	14.0	14.0	18.7	37.3	28.0	9.3	4.7	4.7	4.7	4
National average	31.9	29.8	29.8	18.2	32.8	33.3	29.5	16.3	9.7	6.2	2.4	46

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

<sup>2</sup> Waste receptacle with plastic bin liner.

<sup>3</sup> All infection precaution items include: soap and running water or else alcohol-based hand disinfectant, latex gloves, safety box or needle destroyer, waste receptacle with plastic bin liner, and injection safety precaution guideline.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 41 Items for infection control during provision of HIV testing services in the laboratory**

Among facilities having HIV testing capacity, the percentages with indicated items for infection control observed to be available at the laboratory on the day of the survey, by facility type and province

Background characteristics	Percentages of facilities with HIV testing system that have items for infection control											Number of facilities having laboratory HIV testing capacity
	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	Safety box	Needle destroyer	Waste receptacle <sup>2</sup>	Injection safety precaution guideline	All infection prevention items <sup>3</sup>	
<b>Facility type</b>												
Zonal and above hospitals	100.0	100.0	100.0	62.0	100.0	100.0	81.0	47.4	28.5	4.7	4.7	4
District level hospitals	92.3	92.3	89.7	53.8	94.9	97.4	94.9	33.3	12.8	0.0	0.0	8
Private hospitals	93.4	100.0	93.4	74.6	100.0	96.7	77.9	48.2	45.0	6.6	3.3	6
PHCCs	90.0	90.0	90.0	45.0	90.0	100.0	85.0	25.0	10.0	20.0	5.0	4
HPs	100.0	76.3	76.3	71.1	100.0	100.0	100.0	23.7	23.7	0.0	0.0	3
Stand-alone HTC	83.0	84.6	78.8	51.0	84.6	95.9	61.3	73.8	19.7	6.4	3.5	14
<b>Province</b>												
Province 1	100.0	100.0	100.0	65.1	100.0	100.0	94.2	82.6	36.0	11.6	5.8	4
Province 2	97.2	89.0	89.0	53.4	89.0	100.0	61.9	11.0	8.1	0.0	0.0	7
Province 3	88.0	96.0	88.0	71.9	96.0	92.3	74.2	61.1	27.3	0.0	0.0	10
Province 4	85.7	89.7	85.7	53.2	89.7	96.0	89.7	69.8	24.6	4.0	0.0	5
Province 5	87.0	80.4	77.9	44.1	89.5	100.0	73.5	53.0	22.6	11.0	8.5	8
Province 6	100.0	88.9	88.9	77.8	100.0	100.0	100.0	44.4	33.3	22.2	11.1	2
Province 7	83.7	89.1	83.7	43.4	89.1	100.0	89.1	32.6	16.3	10.9	0.0	4
National average	90.4	90.1	86.5	57.4	92.5	97.5	78.2	49.9	22.5	5.9	2.8	40

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

<sup>2</sup> Waste receptacle with plastic bin liner.

<sup>3</sup> All infection precaution items include: soap and running water or else alcohol-based hand disinfectant, latex gloves, safety box or needle destroyer, waste receptacle with plastic bin liner, and injection safety precaution guideline.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 42 Guidelines, trained staff, and items for HIV/AIDS care and support services**

Among all facilities, the percentages offering HIV/AIDS care and support services and, among facilities offering HIV care and support services, the percentages having indicated items to support the provision of quality HIV/AIDS care and support services, by facility type and province

Background characteristics	Percentages of facilities offering HIV/AIDS care and support services <sup>1</sup>	Number of facilities	Percentages of facilities offering HIV/AIDS care and support services that have:					Medicines					Number of facilities offering HIV/AIDS care and support services	
			National guidelines for the clinical management of HIV/AIDS	Guidelines on CHBC <sup>2</sup>	Trained staff <sup>3</sup>	System for screening and testing HIV+ clients for TB <sup>4</sup>	IV solution with infusion set	Fluconazole tablet or ointment	Cotrimoxazole tablets	First-line treatment for TB <sup>5</sup>	Pain management <sup>6</sup>	Male condoms		
<b>Facility type</b>														
Zonal and above hospitals	76.1	6	53.9	4.5	22.4	62.8	91.0	64.1	49.4	63.2	86.5	100.0	5	
District level hospitals	44.7	16	47.1	11.8	26.5	50.0	97.1	64.7	97.1	100.0	67.6	100.0	7	
Private hospitals	9.6	70	6.1	0.0	3.1	18.7	70.0	66.7	54.4	57.4	70.0	53.8	7	
PHCCs	4.8	42	0.0	0.0	0.0	0.0	70.0	20.0	100.0	90.0	50.0	100.0	2	
HPs	1.9	775	0.0	0.0	6.3	6.3	34.7	8.3	100.0	100.0	8.3	100.0	15	
UHCs	0.0	32	-	-	-	-	-	-	-	-	-	-	0	
Stand-alone HTC	44.9	23	63.1	33.0	40.3	21.5	51.3	67.1	49.7	0.0	19.9	100.0	10	
<b>Province</b>														
Province 1	4.9	166	20.7	10.6	18.2	10.1	43.9	33.8	67.8	64.8	35.8	83.5	8	
Province 2	0.9	174	87.3	36.4	74.5	38.2	100.0	61.8	87.3	38.2	63.6	100.0	2	
Province 3	3.8	192	34.2	0.0	11.4	14.5	82.2	70.6	70.4	59.2	62.3	81.5	7	
Province 4	4.4	122	35.9	0.0	12.2	31.3	54.3	39.0	80.1	64.1	42.8	96.2	5	
Province 5	5.2	144	37.1	27.8	23.5	33.8	56.9	64.5	54.7	46.0	50.3	100.0	8	
Province 6	2.8	74	20.0	10.0	10.0	40.0	80.0	80.0	80.0	70.0	70.0	90.0	2	
Province 7	14.3	92	14.2	4.7	14.9	24.3	56.3	22.1	93.7	89.0	12.6	100.0	13	
National average	4.7	963	27.9	9.7	18.0	23.8	60.7	45.2	76.3	66.9	39.2	93.1	45	

Note: The indicators presented in this table correspond to staff and training, diagnostics and medicines, and commodities domains for assessing readiness to provide HIV care and support services within the health facility assessment methodology proposed by WHO and USAID (2012).

<sup>1</sup> Facility reports that providers at the facility prescribe or provide any of the following services:

- Treatment for any opportunistic infections or for symptoms related to HIV/AIDS, including treatment for topical fungal infections;
- Systematic intravenous treatment for specific fungal infections such as cryptococcal meningitis;
- Treatment for Kaposi's sarcoma;
- Palliative care, such as symptom or pain management, or nursing care for the terminally ill or severely debilitated patients;
- Nutritional rehabilitation services, including client education and provision of nutritional or micronutrient supplementation;
- Fortified protein supplementation;
- Care for pediatric HIV/AIDS patients;
- Preventive treatment for tuberculosis (TB), i.e., isoniazid with pyridoxine;
- Primary preventive treatment for opportunistic infections, such as Cotrimoxazole preventive treatment;
- General family planning counseling and/or services for HIV-positive clients;
- Condoms;

<sup>2</sup> Facility provides community care center (CCC) services and had guidelines on community and home based care (CHBC) available on the day of the survey.

<sup>3</sup> Facility had at least one interviewed provider of HIV care and support services who reported receiving training on aspects of HIV/AIDS care and support services 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>4</sup> Record or register indicating HIV-positive clients who have been screened and tested for TB.

<sup>5</sup> Four-drug fixed-dose combination (4FDC) is available, or else isoniazid, pyrazinamide, rifampicin, and Ethambutol are all available, or a combination of these medicines, to provide first-line treatment.

<sup>6</sup> Diclofenac tablet or injection, or else indomethacin tablets.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 43 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 facility type and province

Background characteristics	Percentages of facilities offering ART services that have:		Laboratory diagnostic capacity for:			First-line adult ART regimen available <sup>4</sup>	Number of designated ART facilities
	National ART guidelines	Trained staff <sup>2</sup>	Complete blood count <sup>3</sup>	CD4 cell count	Renal or liver function test		
<b>Facility type</b>							
Zonal and above hospitals	84.2	36.8	78.9	31.6	100.0	94.7	4
District level hospitals	54.1	40.5	73.0	8.1	86.5	75.7	8
Private hospitals	66.7	0.0	100.0	0.0	100.0	66.7	1
<b>Province</b>							
Province 1	62.5	50.0	75.0	12.5	87.5	87.5	2
Province 2	37.5	37.5	50.0	12.5	75.0	62.5	2
Province 3	66.7	16.7	83.3	16.7	100.0	75.0	2
Province 4	71.4	14.3	100.0	42.9	100.0	85.7	1
Province 5	72.7	54.5	100.0	0.0	100.0	81.8	2
Province 6	50.0	50.0	0.0	50.0	100.0	100.0	0
Province 7	72.7	45.5	63.6	9.1	81.8	90.9	2
National average	64.4	37.3	76.3	15.3	91.5	81.4	12

Note: The indicators presented in this table correspond to the staff and training, diagnostics and medicines, and commodities domains for assessing readiness to provide ART services within the health facility assessment methodology proposed by WHO and USAID (2012).  
 Note: The denominator for this table ART designated facilities.

<sup>1</sup> Providers in the facility prescribe ART for HIV/AIDS patients or provide treatment follow-up services for persons on ART, including providing community-based services.

<sup>2</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>3</sup> Facility had a functioning hematology analyzer or functioning hematological counter with the necessary reagents available in the facility.

<sup>4</sup> Facility had any of the following ARV medicines for adults available at the facility on the day of the survey: AZT/NVP/3TC, TDF/3TC/EFV, AZT/3TC + EFV or TDF/3TC + NVP.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 44 Guidelines, trained staff, and items for antiretroviral therapy services**

Among hospitals and PHCCs, the percentages offering antiretroviral therapy (ART) services and, among PHCCs and hospitals offering ART services, the percentages with indicated items to support the provision of quality ART services, by facility type and province

Background characteristics	Percentages of facilities offering ART services <sup>1</sup>	Number of facilities	Percentages of facilities offering ART services that have:		Laboratory diagnostic capacity for:			First-line adult ART regimen available <sup>4</sup>	Number of facilities offering ART services
			National ART guidelines	Trained staff <sup>2</sup>	Complete blood count <sup>3</sup>	CD4 cell count	Renal or liver function test		
<b>Facility type</b>									
Zonal and above hospitals	71.7	6	61.9	33.3	81.0	28.6	85.7	95.2	4
District level hospitals	46.1	16	51.4	42.9	80.0	8.6	54.3	94.3	7
Private hospitals	4.4	70	6.7	0.0	68.7	0.0	93.3	27.4	3
PHCCs	1.9	42	0.0	25.0	50.0	0.0	25.0	75.0	1
<b>Province</b>									
Province 1	6.8	24	62.5	50.0	87.5	12.5	87.5	87.5	2
Province 2	11.0	20	28.1	28.1	37.5	9.4	62.5	56.3	2
Province 3	9.0	42	32.9	11.0	89.0	11.0	94.5	82.7	4
Province 4	14.4	14	50.0	10.0	90.0	30.0	60.0	90.0	2
Province 5	13.6	18	50.0	50.0	100.0	0.0	58.3	83.3	2
Province 6	9.1	7	33.3	33.3	33.3	33.3	33.3	66.7	1
Province 7	30.2	9	46.2	46.2	61.5	7.7	53.8	84.6	3
National average	11.5	134	42.7	30.7	76.4	12.0	69.3	80.2	15

Note: The indicators presented in this table correspond to the staff and training, diagnostics and medicines, and commodities domains for assessing readiness to provide ART services within the health facility assessment methodology proposed by WHO and USAID (2012).  
 Note: The denominator for this table included only PHCCs and hospitals.

<sup>1</sup> Providers in the facility prescribe ART for HIV/AIDS patients or provide treatment follow-up services for persons on ART, including providing community-based services.

<sup>2</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>3</sup> Facility had a functioning hematology analyzer or functioning hematological counter with the necessary reagents available in the facility.

<sup>4</sup> Facility had any of the following ARV medicines for adults available at the facility on the day of the survey: AZT/NVP/3TC, TDF/3TC/EFV, AZT/3TC + EFV or TDF/3TC + NVP.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

## Annex 1.7 Malaria

**Annex Table 45 Malaria testing capacity in facilities offering curative care for sick children**

Among facilities offering curative care for sick children, the percentages having malaria testing capacity on the day of the survey, by facility type and province

Background characteristics	Malaria diagnostics			Personnel trained in:			Percentages of facilities offering curative care for sick children and having:		Number of facilities offering curative care for sick children
	Malaria RDT <sup>1</sup>	Microscopy <sup>2</sup>	Either RDT or microscopy	RDT <sup>3</sup>	Microscopy <sup>4</sup>	Either RDT or microscopy	Malaria RDT protocol <sup>5</sup>	Diagnostic capacity <sup>6</sup>	
<b>Facility type</b>									
Zonal and above hospitals	82.3	68.2	89.4	0.0	0.0	0.0	14.9	0.0	6
District level hospitals	58.7	57.3	82.7	22.7	24.0	25.3	22.7	12.0	15
Private hospitals	79.1	52.9	85.6	1.0	2.0	2.3	15.0	1.3	65
PHCCs	55.4	41.7	65.6	17.5	23.8	27.2	15.5	14.5	42
HPs	13.0	1.5	13.2	12.8	13.5	16.5	6.2	1.9	775
UHCs	2.3	0.0	2.3	16.1	11.1	16.1	0.0	0.0	31
<b>Province</b>									
Province 1	17.8	9.1	18.8	15.6	13.5	18.2	9.3	2.9	161
Province 2	20.7	6.6	21.7	13.8	9.5	16.2	7.4	2.8	171
Province 3	21.7	12.8	23.3	15.1	16.3	18.2	7.7	3.3	184
Province 4	14.2	5.0	16.0	8.5	13.1	13.1	1.9	0.3	119
Province 5	26.0	7.2	28.2	11.5	14.3	17.3	6.9	1.8	137
Province 6	13.1	4.2	14.3	8.9	14.3	14.3	4.9	2.2	74
Province 7	26.3	9.0	28.6	8.1	11.1	11.1	13.1	4.1	89
National average	20.3	8.2	21.8	12.4	13.2	16.1	7.4	2.5	934

Note: See chapter 4 (Table 4.1) for information on the proportion of all facilities offering curative care for sick children.

<sup>1</sup> Facility had unexpired malaria rapid diagnostic test (RDT) kit available somewhere in the facility.

<sup>2</sup> Facility had a functioning microscope with glass slides and relevant stains for malaria microscopy available somewhere in the facility.

<sup>3</sup> Facility had at least one interviewed provider of child curative care services who reported receiving in-service training on malaria RDT during the 24 months preceding the survey. The training must have involved structured sessions and does not include individual instruction that a provider might have received during routine supervision.

<sup>4</sup> Facility had at least one interviewed provider of child curative care services who reported receiving in-service training on malaria microscopy during the 24 months preceding the survey. The training must have involved structured sessions and does not include individual instruction that a provider might have received during routine supervision.

<sup>5</sup> RDT protocol refers to any written instruction on how to perform a malaria RDT.

<sup>6</sup> Facility had unexpired malaria RDT kits or else a functioning microscope with relevant stains and glass slides, staff member recently trained in either RDT or microscopy, and malaria RDT protocol available in the facility.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 46 Malaria treatment in facilities offering curative care for sick children**

Among facilities offering curative care for sick children, the percentages having indicated items for the provision of malaria services available on the day of the survey, and malaria service readiness index, by facility type and province

Background characteristics	Percentages of facilities offering curative care for sick children that have:			Malaria service readiness index <sup>3</sup>	Number of facilities offering curative care for sick children
	Malaria treatment guidelines	First line treatment medicine <sup>1</sup>	Trained personnel <sup>2</sup>		
<b>Facility type</b>					
Zonal and above hospitals	14.9	50.5	3.5	0.0	6
District level hospitals	13.3	53.3	28.0	1.3	15
Private hospitals	0.3	46.3	2.3	0.0	65
PHCCs	17.0	57.8	28.6	4.8	42
HPs	8.7	28.7	17.2	0.8	775
UHCs	0.7	13.8	16.1	0.0	31
<b>Province</b>					
Province 1	12.9	34.1	19.9	0.1	161
Province 2	6.8	47.3	16.3	0.1	171
Province 3	5.6	19.8	18.3	2.3	184
Province 4	5.3	17.6	14.3	0.0	119
Province 5	12.2	46.3	17.8	0.3	137
Province 6	3.8	14.4	14.9	1.9	74
Province 7	10.3	28.9	11.4	2.6	89
National average	8.3	31.3	16.7	0.9	934

<sup>1</sup> Facility had any of the following recommended first-line antimalarial medicines available in the facility on the day of the survey: ACT (Coartem) tablets, quinine tablets, chloroquine tablets or primaquine tablets.

<sup>2</sup> At least one interviewed provider of child curative care services reports receiving in-service training in malaria diagnosis or treatment during the 24 months preceding the survey. The training must have involved structured session and does not include individual instruction that a provider might have received during routine supervision.

<sup>3</sup> Facilities having malaria diagnostic capacity (unexpired malaria rapid diagnostic test (RDT) kits or else a functioning microscope with relevant stains and glass slides, staff member recently trained in either RDT or microscopy, and malaria RDT protocol available in facility), malaria treatment guideline, first-line medicine, as well as personnel recently trained in malaria diagnosis and/or treatment available.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data

**Annex Table 47 Treatment of malaria in children**

Among sick children whose consultations were observed, the percentages diagnosed as having malaria, fever, or both and, among sick children who were diagnosed as having malaria, fever, or both, the percentages for whom artemisinin combination therapy (ACT) was either prescribed or provided, by facility type and province

Background characteristics	Among all observed sick children, percentages diagnosed as having:			Total number of observed sick children
	Malaria <sup>1</sup>	Fever	Malaria <sup>1</sup> or fever	
<b>Facility type</b>				
Zonal and above hospitals	0.5	17.7	18.2	164
District level hospitals	0.0	15.9	15.9	234
Private hospitals	0.0	22.7	22.7	308
PHCCs	0.5	15.5	15.5	146
HPs	0.3	17.3	17.6	1,306
UHCs	0.0	28.8	28.8	26
<b>Province</b>				
Province 1	0.1	9.8	9.8	301
Province 2	0.2	13.9	14.0	530
Province 3	0.0	24.4	24.4	559
Province 4	0.0	18.4	18.4	160
Province 5	0.4	20.3	20.6	289
Province 6	0.0	17.7	17.7	149
Province 7	1.8	19.4	21.0	197
National average	0.3	17.9	18.2	2,185

<sup>1</sup> Diagnosis of malaria based on information provided by the health worker. The diagnosis may be based on rapid diagnostic test, microscopy, or clinical judgment. It was not verified by the interviewing team.

Source: MoHP, ICF and Abt analysis of 2015 NHFS data