Nepal

2021 Health Facility Survey (NHFS)

Key Findings



2022



This report presents findings of the 2021 Nepal Health Facility Survey (2021 NHFS). The survey received funding from the United States Agency for International Development (USAID), UK's Foreign, Commonwealth & Development Office (FCDO), and the United Nations Population Fund (UNFPA).

ICF provided technical assistance through the worldwide DHS Program, which assists countries in the collection of data to monitor and evaluate population, health, and nutrition programs. New ERA, a national research firm, implemented the survey.

Additional information about the 2021 NHFS may be obtained from Ministry of Health and Population, Ramshah Path, Kathmandu; telephone: +977-1-4262543/4262802; internet: http://www.mohp.org.np; and New ERA, Rudramati Marg, Kalopul, P.O. Box 722, Kathmandu 44600, Nepal; telephone: +977-1-4413603; email: info@newera. com.np; internet: http://www.newera.com.np/.

Information about The DHS Program can be obtained from ICF, 530 Gaither Road, Suite 500, Rockville, MD 20850 USA; Telephone: 301.407.6500; Fax: 301.407.6501; E-mail: reports@DHSprogram.com; Internet: www.DHSprogram.com.

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New ERA





Introduction

The 2021 Nepal Health Facility Survey (NHFS) is the second comprehensive assessment of health facilities in Nepal that harmonizes various health facility surveys among the Ministry of Health and Population and health development partners. The survey was designed to collect information from health facilities in the country on the delivery of health care services and to examine the preparedness of facilities to provide quality health services in child health, family planning, maternal and newborn care, HIV, sexually transmitted infections, non-communicable diseases, mental health, and tuberculosis.

The 2021 NHFS used four types of questionnaires:

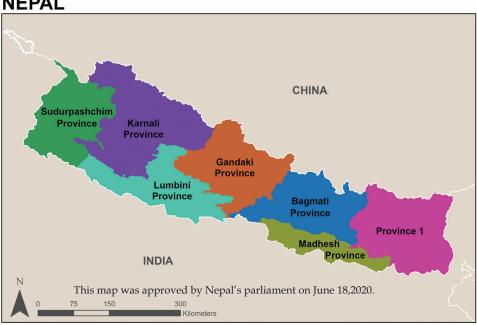
- Facility inventory questionnaire
- Health provider interview questionnaire
- · Observation protocol of consultations and examination of sick children, antenatal care, family planning, and labor and delivery
- · Client exit interview questionnaires for women attending antenatal care, family planning clients, postpartum women, and caretakers of sick children

The 2021 NHFS sampled 1,633 facilities throughout Nepal, but seven of these health facilities were duplicates of other health facilities. Of the remaining 1,626 selected facilities, 49 facilities were permanently closed, unreachable, or refused to participate. Data were successfully collected from a total of 1,576 facilities. The results of the survey are presented by facility type, managing authority, for three ecological regions, and by province.

Number of rachines Surveyed in the 2021 NHFS							
	Weighted	Unweighted					
Facility Type							
Federal/provinicial level hospitals	27	97					
Local-level hospitals	17	45					
Private hospitals	116	258					
Primary health care centers (PHCCs)	51	183					
Health posts (HPs)	1,064	380					
Urban health centers (UHCs)	154	284					
Community health unit (CHUs)	135	288					
HIV testing and counseling (HTCs)	11	41					
Managing Authority							
Public	1,448	1,277					
Private	128	299					
Province							
Province 1	264	258					
Madhesh province	247	177					
Bagmati province	325	311					
Gandaki province	198	223					
Lumbini province	243	251					
Karnali province	129	158					
Sudurpashchim province	170	198					
National Total	1,576	1,576					

Number of Facilities Surveyed in the 2021 NHFS

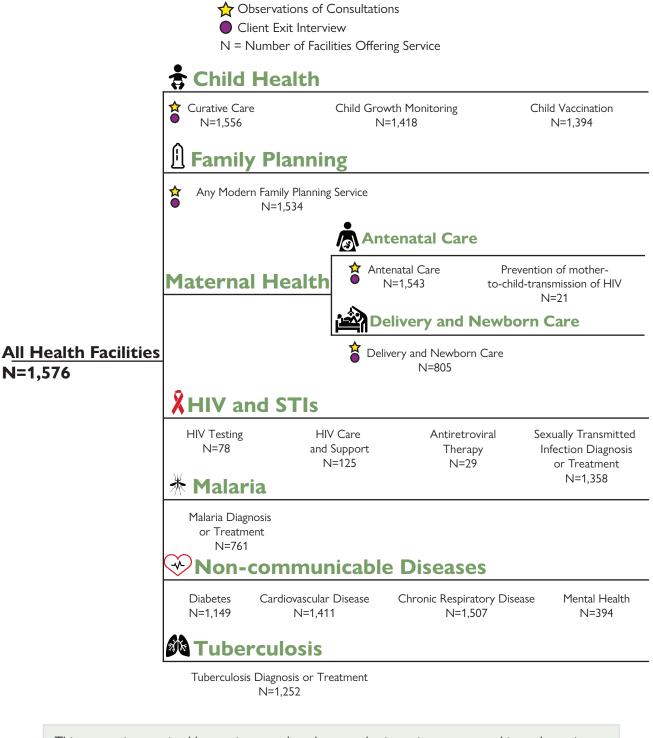
The 2021 NHFS interviewed 6,934 health service providers who were present in the facility on the day of the survey. Overall, 62% were paramedics, 15% were nurses, 11% were doctors, 9% were technicians, and 3% were other clinical providers. For the observation component of the survey, antenatal care, family planning, and curative care for sick children clients were selected at each service site on the day of the survey. Overall, 2,383 sick children, 849 family planning clients, and 1,966 antenatal care clients were observed. For the labor and delivery component, 475 deliveries were observed, as well as 546 postpartum maternal care consultations.



NEPAL

Understanding the 2021 Nepal HFS

This legend provides iconic description of the health service areas, if observations or client exit interviews were conducted, and number of facilities offering the type of service.



This report is organized by service area, but the same basic topics are covered in each section. Use the icons below to identify the main results within each section.



HEALTH FACILITIES IN NEPAL

Availability of Services

The availability of a basic package of health services and frequency of these services contribute to client utilization of services at a health facility. However, if a facility does not offer all services, it should not be assumed that the facility is substandard. Three quarters (75%) of all healthcare facilities offer all basic client services including curative care for sick children, child growth monitoring, child vaccination, any modern method of family planning (FP), antenatal care (ANC), and services for sexuallytransmitted infections (STIs). The availability of all basic services is nearly four times higher in public facilities (79%) than in private facilities (20%). By province, availability of all basic client services ranges from a low of 66% in Bagmati and Province 1 to a high of 84% in Lumbini province.

Service availability varies by type of facility. For example, the availability of child growth monitoring is nearly universal in HPs and PHCCs (98% each). Similarly, private hospitals are least likely to offer child vaccination services. All PHCCs, HPs, UHCs, and CHUs offer at least one modern method of family planning, compared to only 7 in 10 private hospitals. Most facility types offer ANC services. The vast majority of hospitals (federal/provincial level, local-level, or private) and PHCCs offer services for STIs.

Basic Amenities

Since the 2015 NHFS, the availability of basic client amenities at health facilities has improved. Currently, around 9 in 10 facilities have a client latrine (89%), an improved water source (94%), and visual and auditory privacy (90%). The availability of emergency transport increased from 59% of all facilities in 2015 to 80% of facilities in 2021, while the availability of regular electricity at health facilities increased from 49% to 78% over the same time period. Over half (55%) of health facilities have a computer with internet, a five-fold increase since 2015 (11%). Still, less than 1 in 5 facilities (17%) has all amenities (excluding computer with internet). Private hospitals are most likely to have all amenities (87%).

Infection Control

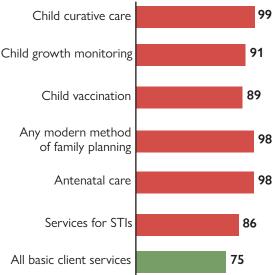
Eight in 10 facilities have any equipment for sterilization. Over 90% of federal/provincial level hospitals, private hospitals, and PHCCs have sterilization equipment. Ninety-four percent of facilities have latex gloves and 82% have medical, surgical, or N95 masks. Nearly all facilities (97%) have soap and running water or an alcohol-based hand disinfectant. 2021 Nepal Health Facility Survey (NHFS)

NHFS Definition:

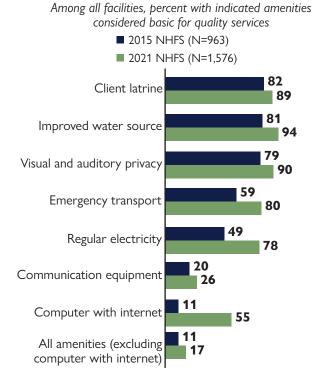
Available: Only observed items are classified as available. Items that are reported as being available but are not observed or seen by the interviewers are not considered available.

Availability of Basic Client Services

Among all facilities excluding HTCs, percent offering indicated basic client services



Trends in Availability of Basic Amenities for Client Services



CHILD HEALTH

Availability of Child Health Services

Nearly all health facilities offer outpatient curative care for sick children, 91% offer growth monitoring services, and 89% offer child vaccination services. Eighty-six percent of health facilities offer all three basic child health services. The availability of all three basic child health services is higher in HPs (98%) and PHCCs (97%) than in other facility types. Among managing authorities, 91% of public facilities offer all three basic child health services compared to 21% of private facilities.

Guidelines and Equipment for Child Curative Care Services

Among health facilities offering outpatient curative care for sick children (N=1,554), 99% offer these services five days or more per week. Half of facilities have visible Integrated Management of Neonatal and Childhood Illness (IMNCI) guidelines. None of the facilities had all guidelines, trained staff, and necessary equipment such as weighing scales, thermometers, stethoscope, or child health cards.

Management Practices and Training

Of 4,966 interviewed providers of child health services, only 22% received any in-service training related to child health during the two years before the survey. Two thirds were supervised in the six months before the survey.

Among child health providers, in-service training within the last two years covered a range of topics including National Immunization Program (NIP) or cold chain monitoring (8%), IMNCI (9%), maternal, infant and young child nutrition (MIYCN) (5%), performing malaria rapid diagnostic testing (4%), essential nutrition action (4%), and iron deficiency disorder (3%).

Infection Control

Nearly all (97%) facilities offering outpatient curative care services for sick children have soap and running water or else alcohol-based hand disinfectant, and 94% have latex gloves. Fewer child health facilities have a needle destroyer or cutter (29%), 25% have a waste receptacle, and 7% have infection prevention guidelines. Just 1% of health facilities have all infection prevention items.

Laboratory Diagnostic Capacity

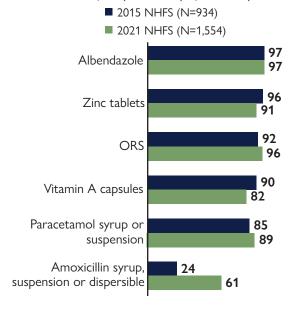
Among facilities offering outpatient curative care for sick children (N=1,554), 25% have the ability to measure hemoglobin to assess anemia, 36% can diagnose malaria, and 16% have the capacity to do a stool microscopy. Overall, 12% of facilities have the diagnostic capacity to conduct all three tests. Not surprisingly, hospitals (federal/provinical level, locallevel, and private) have the highest diagnostic capacity for all three tests compared to other facility types. Private facilities have more laboratory diagnostic capacity than public facilities.

Availability of Essential Medicines

Nine in ten health facilities offering outpatient curative care services for sick children have Albendazole (97%) for worm infestation, zinc tablets (91%) and oral rehydration salts (ORS) (96%) for dehydration. Nearly 9 in 10 facilities have paracetamol and 82% have vitamin A capsules. The 2021 NHFS found that 61% of facilities had amoxicillin on the day of the survey, a substantial increase since 2015, when just 24% of facilities offering outpatient curative care services had amoxicillin available on the day of the survey.

Trends in Availability of Essential Medicines and Commodities

Among facilities offering outpatient curative care services for sick children, percent where essential medicines were observed to be available in the facility on the day of the survey



Assessment, Examination, and Treatment of Sick Children

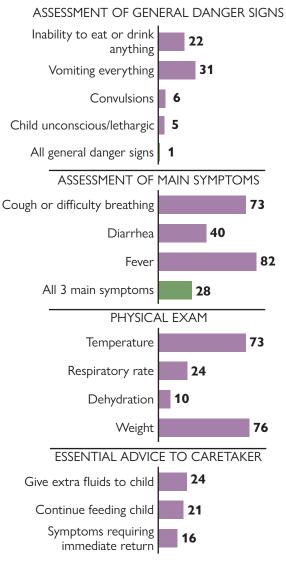
A total of 2,383 sick child consultations were observed. Providers checked children for all four major danger signs in only 1% of consultations: ability to eat or drink anything (22%), vomiting (31%), convulsions (6%), and unconscious or lethargic (5%). Providers assessed all three main symptoms in 28% of observed consultations: fever (82%), cough/difficulty breathing (73%), and diarrhea (40%). Various aspects of the physical examinations were also missing – only 10% of sick children were assessed for dehydration. Only 24% of sick children had their respiratory rate assessed, though 76% of sick children were weighed and 73% had their temperature taken. Caretakers of sick children must be informed how to take care of their children once they return home. Few providers in Nepal are advising caretakers how to increase fluids (24%), why to continue feeding the child (21%), and what symptoms require a return visit (16%).

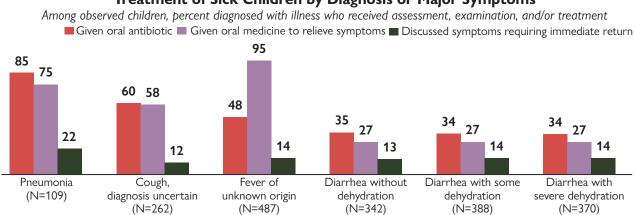
Treatment by Diagnosis

Providers should follow IMNCI guidelines for diagnosis and treatment of specific illnesses. More than 9 in 10 children with fever were given a medication for symptomatic treatment, such as a fever reducer, and nearly half of children with fever were given an oral antibiotic. More than a third of children with diarrhea (with or without dehydration) were given an oral antibiotic, while 27% were given oral medicine to relieve symptoms. A majority of children with pneumonia were given oral antibiotics (85%), as were 58% of children with cough of unknown origin. Irrespective of diagnosis or major symptoms, less than 1 in 4 sick child consultations involved a discussion of symptoms requiring immediate return.

Observed Assessments and Examinations

Among observed consultations with sick children (N=2,383), percent that include:





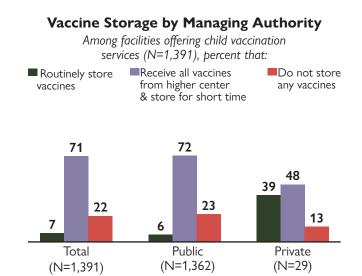
Treatment of Sick Children by Diagnosis or Major Symptoms

CHILD HEALTH

Frequency and Availability of Vaccines

In Nepal, eight vaccines – BCG, pentavalent, polio, measles-rubella, pneumococcal, Japanese encephalitis, rotavirus, fIPV-are routinely offered by health facilities. Most facilities that offer each specific vaccine offer vaccination services 1-2 days per week. Vaccination services are offered most frequently at federal/ provincial-level hospitals and private hospitals.

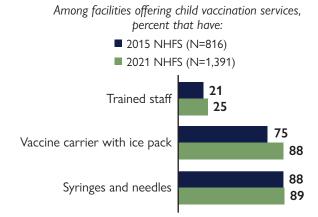
Overall, 7% of facilities routinely store vaccines compared to 71% of facilities that receive vaccines from a higher center and store for a short duration. Federal/ provinicial level hospitals, private hospitals, and PHCCs are more likely to routinely store vaccines than other facility types. By managing authority, private facilities are more likely to routinely store vaccines, while public facilities are more likely to receive all vaccines from a higher center and store for a short period.



Guidelines and Equipment for Vaccination Services

Among all health facilities offering child vaccination services (N=1,391), 94% have child health cards and 70% have an immunization schedule, while just 37% conduct microplanning for immuization and 25% have staff that received training on the Expanded Program on Immunization (EPI) in the last 24 months. Nearly 9 in 10 facilities have a vaccine carrier with ice pack and syringes and needles. Less than 10% of facilities have all items for vaccination services. The 2021 NHFS shows modest improvements in trained staff and equipment for vaccination services since 2015, most notably more facilities offering vaccination services have a vaccine carrier with ice pack in 2021 (88%) than in 2015 (75%).

Trends in Trained Staff, and Equipment for Vaccination Serivces



Infection Control

Among facilities offering child vaccination services, the availability of items for infection control varies. Nearly all (95%) facilities have soap and running water or else alcohol-based disinfectant. Fewer have a waste receptacle or infection prevention guidelines, and just 3% have all infection control items.

FAMILY PLANNING

Availability of Family Planning (FP) Services

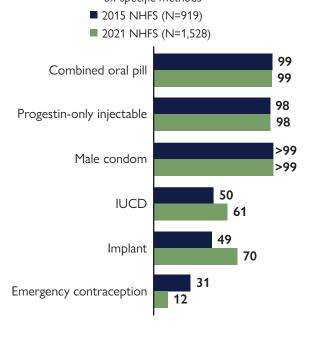
Overall, 98% of all health facilities offer any modern method of FP such as the pill, progestin-only injectables, implants, intrauterine contraceptive devices (IUCD), male condoms, and female or male sterilization. The availability of any modern method of FP is much higher in public facilities compared to private facilities (>99% vs. 71%). Of the health facilities offering any modern method of FP services (N=1,528), 99% offer any FP services five or more days a week.

Family Planning Methods Offered

The majority of facilities offering any modern method of FP offer the male condom (>99%), combined oral contraceptive pills (99%), and progestin-only injectables (98%). Seven in ten facilities offer implants, a substantial increase since 2015 when 49% of facilities offered implants. Similarly, more facilities are offering IUCDs in 2021 (61%) than in 2015 (50%). In contrast, just 12% of facilities offer emergency contraception, a decrease from 31% of facilities in 2015. Currently, less than half of facilities offer female sterilization (43%) or male sterilization (42%).

Trends in Family Planning Commodities Offered

Among facilities offering any modern method of family planning, percent that provide, prescribe, or counsel clients on specific methods



NHFS Definitions:

Offer: Facility provides the method, prescribes the method for clients to obtain elsewhere, or counsels clients on the method without actually making the method available to the client in the facility.

Provided: Facility reports that it stocks the method and makes it available to clients when they visit the facility. These clients can obtain the method without leaving the facility.

Family Planning Services Provided

Nearly all facilities offering any modern method of FP (N=1,528) provide male condoms (97%), combined oral contraceptive pill (96%), and progestin-only injectables (95%). Less than half of facilities provide implants (41%) or IUCDs (29%). Just 2% provide male sterilization or female sterilization, and only 6% provide emergency contraception. Overall, more than 9 in 10 facilities provide three temporary modern methods, while just 24% provide five temporary modern methods.

Availability of Family Planning Commodities

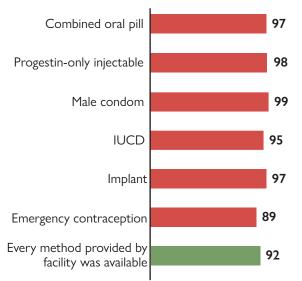


Nearly all facilities that report providing specific FP methods had those methods available on the day of the survey. Male condoms, injectables,

and pills are among the most widely available methods in facilities. The availability of FP methods was lowest at private hospitals compared to other facility types. Overall, 92% of facilities had every method they provide available on the day of the survey.

Availability of Family Planning Commodities

Among facilities that provide the indicated modern method of family planning, percent where the method was available on the day of the survey



FAMILY PLANNING

Observation of Family Planning Consultations

Interviewers for the 2021 NHFS observed FP consultations to assess how closely providers adhere to nationally recognized standards for quality service provision. Interviewers observed 848 FP consultations; 29% of the consultations were new FP clients and 71% of observed consultations were continuing FP clients.

According to the 2021 NHFS, FP counseling of new and continuing clients does not include all recommended elements, and providers miss opportunities to screen for STIs and chronic illnesses. Among consultations with new clients (N=245), only 6% had all elements of reproductive history (age, pregnancy history, current pregnancy status, the desired timing for the next or desire for another child, breastfeeding status, and regularity of menstrual cycle) as part of their consultation. Among new FP clients, 23% were asked about any chronic illness, 10% symptoms of STIs, and 4% smoking history, which is of major concern. Providers were most likely to measure blood pressure (72%) and weigh clients (52%).

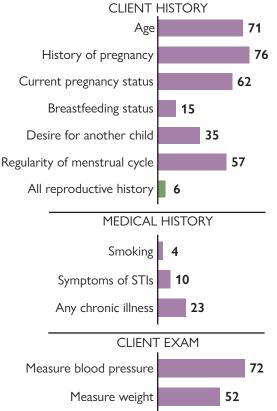
Over half of FP consultations with all first-visit FP clients included discussions of client concerns about her contraceptive method; fewer included discussions about side effects (40%). Only 12% of consultations had any discussion related to STIs. Lack of privacy may account for this, as only 14% of consultations took place under conditions of privacy and confidentiality.

Client Knowledge about Family Planning Method

Observed FP clients participated in exit interviews to assess their knowledge about their chosen method. Nearly all clients who use the pill (99%) were able to correctly answer the question, "How often do you take the pill?" Almost all Progestin-only injectable users (96%) correctly answered the question, "How long does the injection provide protection against pregnancy?" and 95% of male condom users correctly answered, "How many times can you use one condom?" In contrast, ust 43% of IUD users correctly answered the question, "What can you do to make sure that your IUCD is in place?"

Observed Elements of Client History for First-visit Family Planning Clients

Among observed consultations with first-visit FP clients (N=245), percent that include:



Infection Control

The vast majority of facilities offering any modern method of family planning (N=1,528) have soap and running water or else alcohol-based hand disinfectant (96%) and latex gloves (94%). Fewer facilities have a needle destroyer/cutter (27%) or waste receptacle (23%), and just 7% have infection prevention guidelines. The majority of facilities (99%) do not have all infection prevention items.

Guidelines and Basic Equipment for Family Planning Services

Key items for the provision of quality FP services are missing from many health facilities in Nepal. Only 4% have a pelvic model for the IUCD and 8% have a model for showing condom use. One in five facilities has guidelines on FP. In contrast, blood pressure apparatus (96%), examination light (92%) and an examination bed or table (92%) are widely available.

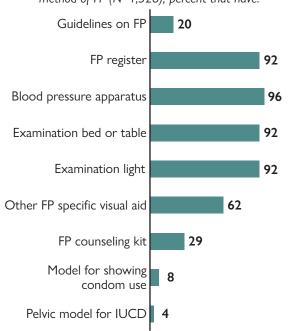
Management Practices and Training

The 2021 NHFS collected data on training and management of 4,250 FP service providers. Only 9% of FP providers received in-service training related to FP during the two years before

the survey. Two-thirds of FP personnel had personal supervision or technical support from a facility-based supervisor or visiting supervisor during the six months before the survey.

Among FP providers, in-service training within the last two years covered a range of topics including counseling for FP (6%), insertion/removal of implant (3%), and insertion/removal of IUCD (3%). Small percentages of FP providers have received training in non-scalpel vasectomy (<1%), minilap tubal ligation (1%), FP for HIV-positive clients (1%), and post-partum FP (3%).





method of FP (N=1,528), percent that have:

MATERNAL HEALTH: ANTENATAL CARE



Availability of Antenatal Care (ANC)

Overall, 98% of all health facilities in Nepal offer ANC services. Among facilities that offer ANC services (N=1,538), 97% offer ANC services five or more days per week.

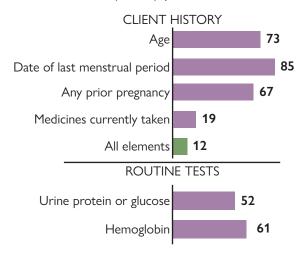
Observations of ANC Consultations

Interviewers for the 2021 NHFS observed clientprovider interactions of 1,966 ANC clients. Four in ten observed clients were visiting for the first time in their pregnancy, while the remaining 60% were coming for a follow-up visit. For 45% of ANC clients, this was their first pregnancy.

ANC providers were not thorough in taking client history or providing routine tests. Although 85% of firstvisit ANC clients (N=420) were asked the date of their last menstrual period, only 19% were asked about current medications. Just 12% of consultations had all elements of client history assessed. Six in ten first-visit ANC clients had a hemoglobin test (61%) and 52% had a urine protein or glucose test, as recommended.

Observed Elements of Client History for First-visit ANC Clients

Among observed consulations with first-visit ANC clients (N=420), percent that include:



The components of the basic physical examination were performed in the majority of observed consultations for all ANC clients (N=1,966). Nine in ten pregnant women had their blood pressure measured, 89% were weighed, and in 71% of consultations the provider listened to the fetal heart. Among preventive interventions, the provider gave or prescribed iron or folic acid tablets in 68% of consultations. In comparison, in only 23% of consultations did the provider administer or prescribe the diptheria vaccine.

ANC providers did not routinely inform women of symptoms related to pregnancy complications. Severe lower abdominal pain was discussed in only 4 in 10 consultations and vaginal bleeding was discussed in 35% of consultations. One-quarter of consultations included discussion about loss of, excessive, or normal fetal movement. Twenty-eight percent of consultations included discussion of headache or blurred vision. Even fewer consultations included discussion of swollen hands, face, or body (17%); fever (8%); convulsion or loss of consciousness (5%); or tiredness, shortness of breath (4%). Fewer than two-thirds of the observed consultations involved discussions of at least one risk symptom.

ANC Client Exit Interviews

Pregnant women attending ANC who were observed were also interviewed when they left the facility about the health education they received. Four in ten pregnant women reported that the provider discussed or counselled on any pregnancy-related risk signs and symptoms. Vaginal bleeding and headaches or blurred vision were the most commonly discussed warning signs. One-quarter of pregnant women reported that no advice was given on recommended actions to take if warning signs occurred.

Availability of Medicines



Ninety-five percent of health facilities offering ANC services (N=1538) have all essential medicines including the combined iron and folic

acid tablets and albendazole. Availability of these medicines is lowest in private health facilities that offer ANC services, including private hospitals.

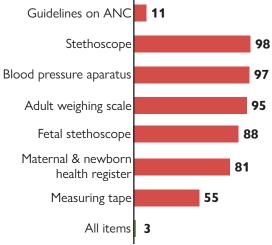
Guidelines and Basic Equipment for ANC Services

Eleven percent of facilities have guidelines on ANC. The vast majority of facilities offering ANC services have a stethoscope (98%), blood pressure apparatus (97%), and adult weighting scale (95%). Nearly 9 in 10 facilities have a fetal stethoscope and 81%

have a maternal & newborn health register. Over half of facilities have measuring tape for assessing fundal height. Overall, only 3% of health facilities in Nepal have all ANC items.

Guidelines and Basic Equipment for Antenatal Care Services

Among facilities offering ANC services (N=1,538), percent that have:



Infection Control

Nearly all facilities offering ANC services have soap and running water or else alcohol-based hand disinfectant (97%) and latex gloves (94%). About one quarter of facilities have a needle destroyer/ cutter (27%), 22% have a waste receptacle, while only 7% have infection prevention health care guidleines. Just 1% of facilities offering ANC services have all infection prevention items.

Testing Capacity

Among facilities offering ANC services, 28% can test urine protein, 27% can conduct a urine glucose test, and 25% can check hemoglobin. While 22% of facilities can test for syphilis, only 3% can test for HIV. Private facilities have higher testing capacity than public facilities.

Management Practices and Training

the six months before the survey.

The NHFS collected information on training and supervision of 3,849 ANC service providers. Just 12% of ANC providers received training related to ANC in the two years before the survey. Nearly twothirds of providers received personal supervision during

Among ANC providers, in-service training within the last two years covered a range of topics including counseling for ANC on nutrition, FP, and newborn care (5%); ANC screening topics such as blood pressure monitoring, urine glucose, and urine protein (4%); complications of pregnancy and their management (5%); nutritional assessment of pregnant women (3%); Essential Nutrition Actions (ENA) training (3%); and case management or treatment of malaria in pregnancy (1%). ANC providers at PHCCs are most likely to have received the various in-service trainings.

MATERNAL HEALTH: ANTENATAL CARE



Prevention of mother-to-child transmission of HIV in ANC Facilities

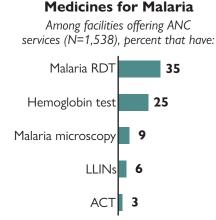
The prevention of mother-to-child transmission (PMTCT) of HIV program aims to reduce the risk of HIV transmission during pregnancy, delivery, and breastfeeding. Among facilities offering ANC, 1% offer PMTCT services. The availability of PMTCT services is highest among federal/provinicial level hospitals (63%) and local-level hospitals (11%). Among facilities offering ANC and PMTCT services (N=21), almost all provide HIV testing and counseling (HTC) for pregnant women, nutrition counseling for HIV-positive women or infants born to HIV-positive women, and (ARV) prophylaxis for HIV-positive women or infants born to HIV-positive women. Nine in 10 facilities have the capacity to test infants born to HIV-positive women for HIV.

Six in ten facilities offering ANC and PMTCT services have PMTCT guidelines, 78% have adult HIV testing capacity, and 38% prepare dried blood spot (DBS) for HIV testing. The majority of facilities have ARV medicines: 89% have AZT syrup, 70% have NMP syrup, and 91% had the preferred maternal first-line regimens.

Malaria Prevention and Treatment Services in ANC Facilities

Among facilities offering ANC services (N=1,538), 6% of facilities distribute long-lasting insecticide-treated nets (LLINs) to pregnant women attending ANC. Merely 3% of facilities have ACT, the recommended antimalarial medicines, available. More than one third of facilities have malaria rapid diagnostic testing (RDT). However, only 9% of facilities can perform malaria microscopy. One in four facilities can test hemoglobin. Diagnostics such as malaria RDT, microscopy, and hemoglobin are more readily available in private facilities than in public facilities.

Equipment, Diagnostics, and



MATERNAL HEALTH: DELIVERY AND NEWBORN CARE

Availability of Normal Vaginal Delivery and Cesarean Delivery Services

Among all facilities, 51% offer normal vaginal delivery services and 5% offer Cesarean delivery services. The vast majority of federal/provincial level hospitals (95%), local-level hospitals (94%), and PHCCs (97%) offer normal vaginal delivery services. Only hospitals offer Cesarean deliveries.

Among facilities offering normal vaginal delivery services (N=804), 31% have a provider of delivery care available on-site or on-call 24 hours per day with an observed duty schedule. More than 90% of federal/ provincial level hospitals have a provider available onduty or on-call compared to only 23% of HPs.

Signal Functions for Emergency Obstetric and Neonatal Care

Facilities that offer normal vaginal delivery care should be prepared to provide the most important interventions—emergency obstetric and neonatal care (EmONC) signal functions—to manage delivery complications when they occur. Signal functions reflect the responsiveness of health services to the main obstetric complications at the basic and comprehensive levels.

Among signal functions performed in the last three months, the most commonly practiced is the administration of parenteral oxytocic (88%). Less than 4 in 10 facilities administered parenteral antibiotics or performed manual removal of placenta at least once during the same time period. Three in ten facilities performed neonatal resucitation and 26% of facilities removed retained products of conception (MVA). However, only 9% administered anticonvulsants and 8% carried out assisted vaginal deliveries at least once in the previous three months. Signal functions were most commonly performed in federal/provincial level hospitals and least commonly performed in UHCs and CHUs in the previous three months.

Among hospitals and PHCCs offering normal vaginal delivery services (N=153), only 39% had performed a blood transfusion and 46% had performed a Cesarean delivery in the three months before thee survey. A facility is said to have carried out comprehensive emergency obstetric and neonatal care (CEmONC) if they performed a blood transfusion, a Cesarean delivery, and all seven basic EmONC signal functions in the three months prior to the survey. Just 11% of facilitites carried out CEmONC.

Infection Control

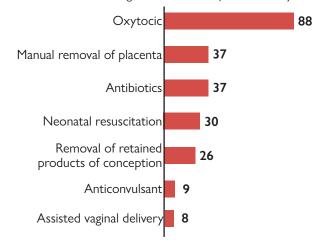
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Nearly all facilities offering normal delivery services have soap and running water or else

alcohol-based disinfectant (97%) and latex gloves (98%). Over one-third have a waste receptacle (35%) and 29% have a needle destroyer/cutter. One in ten facilities has infection prevention an health care guidelines. Merely 3% of facilities offering delivery services have all infection prevention items.

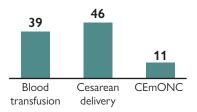
Signal Functions for Emergency Obstetric and Neonatal Care

Among facilities offering normal vaginal delivery services (N=804), percent that performed the following services at least once during the 3 months before the survey



Comprehensive Emergency Obstetric and Neonatal Care (EmONC) among Hospitals

Among hospitals and PHCCs offering normal vaginal delivery services (N=153), percent that performed the following services at least once during the 3 months before the survey



MATERNAL HEALTH: DELIVERY AND NEWBORN CARE

Newborn Care Practices

Among facilities offering normal vaginal delivery services (N=804), more than 90% report the following routine components of newborn care: drying and wrapping newborns to keep warm, initiation of breastfeeding within the first hour, weighing the newborn immediately upon delivery, routine complete examination of newborns before discharge, applying chlorhexidine ointment to an umbilical cord stump, delivery to abdomen (skin-to-skin), and kangaroo mother care. About 1 in 5 (19%) facilities report administering vitamin K to a newborn, 10% report giving the BCG vaccine prior to discharge, and 6% report applying tetracycline eye ointment. Routine newborn care practices are more commonly practiced in public facilities than private facilities.

Availability of Medicine for Deliveries, Newborns, and Mothers

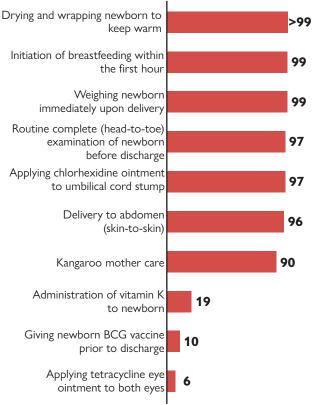
Among facilities offering normal vaginal delivery services, the majority of facilities (80%) do not have all four essential medicines for delivery – injectable uterotonic (oxytocin), injectable antibiotic, skin antiseptic, and intravenous fluids with infusion set. Availability of all four essential medicines for delivery is highest in federal/provincial level hospitals (84%) and lowest in CHUs (2%).

Very few facilities offering normal vaginal delivery services have all five essential medicines for newborns tetracycline eye ointment, 4% chlorhexidine ointment, injectable gentamicin, ceftriaxone powder for injection, and amoxicillin. Federal/provincial level hospitals (15%) are most likely to offer the five essential medicines for newborns.

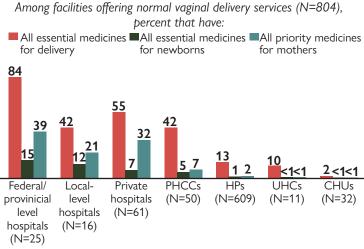
The eight priority medicines for mothers are not readily available at facilities. Only 6% of health facilities in Nepal have all eight medicines – sodium chloride injectable solution, injectable calcium gluconate, ampicillin powder for injection, injectable metronidazole, misoprostol, azithromycin, cefixime, and injectable bethamethasone or dexamethasone. Availability of all priority medicines for mothers is highest at federal/provincial level hospitals (39%) and private hospitals (32%).

Newborn Care Practices

Among facilities offering normal vaginal delivery services (N=804), percent reporting the indicated practice is a routine component of newborn care



Availability of Medicines for Deliveries, Newborns, and Mothers by Facility Type



Guidelines and Equipment for Delivery Services

Among facilities offering normal vaginal delivery services, 13% have guidelines for delivery care such as the Nepal Medical Standards volume III or Reproductive Health clinical guidelines. Nearly all facilities have a delivery bed (99%), gloves (98%), and delivery pack (98%). Nine in ten facilities have a neonatal bag and mask (92%) and partograph (90%). Eight in ten facilities have emergency transport. The availability of emergency transport is higher in private facilities (96%) than in public facilities (80%). Fewer facilities have a manual vacuum extractor (23%) and vacuum aspirator or MVA kit (21%).

Management Practices and Training

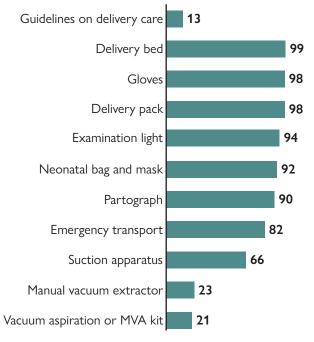
The 2021 NHFS collected information on training and supervision of 2,742 providers of normal vaginal delivery or newborn care services. Sixteen percent of providers received training related to delivery and/or newborn care in the two years before the survey. More than 6 in 10 providers received personal supervision during the six months before the survey.

Among providers, in-service training in delivery care within the last two years covered a range of topics including active management of third stage of labor (8%), skilled birth attendant (SBA) (7%), routine care during labor and delivery (7%), post-abortion care (5%), maternal nutrition and health update/emergency obstetric care/lifesaving skills (7%), advanced SBA (3%), and comprehensive abortion care (3%).

Among providers, in-service training in immediate newborn care within the last two years covered a range of topics including kangaroo mother care for low birth weight babies (11%), neonatal resuscitation (9%), early and exclusive breastfeeding (8%), sterile cord cutting and care (8%), thermal care (8%), and newborn infection management (5%).

Guidelines and Equipment for Delivery Services

Among facilities offering normal vaginal delivery services (N=804), percent that have:



Observed deliveries

Interviewers of the 2021 NHFS observed 475 deliveries. Over half of observed deliveries were conducted by a nursing professional (55%) and 38% were conducted by an auxiliary midwife. Among deliveries observed during the second and third stage of labor (N=463), in the vast majority of deliveries the provider wore high level disinfected or sterile gloves on both hands prior to any examination of the woman (98%), put on a clean mask in preparation for the birth (95%), and put on a clean gown or apron in preparation for the birth (92%). However, in just two-thirds of deliveries the provider washed their hands (66%) or put high-level disinfectant on their hands (58%) prior to any examination of the woman. Among deliveries observed during the third stage of labor (N=463), providers administered a utertonic after delivery in 96% of delivieres and providers applied traction to the umbilical cord in 91% of deliveries. Among delivieries observed during the immediate newborn and postpartum care period (N=462), in 93% of deliveries the umbilical cord was cut with a clean blade or scissors and in 80% breastfeeding was initiated within the first hour of birth. For the majority of observed deliveries (N=461), the provider demonstrated caring and appropriate behavior toward the client (66%), explained to the client about the procedures in a language the client could understand, and encouraged the client to ask questions (58%).



Availability of HIV Testing and Counseling **Services**

Few health facilities in Nepal have an HIV testing system. Among facilities with an HIV testing system (N=78), 73% have HIV testing capacity. Local-level hospitals, UHCs, CHUs, and stand-alone HTC sites are more likely to have the capacity to test for HIV. Nearly 7 in 10 facilities have condoms available on the day of the survey. Eight in ten public facilities have condoms available compared to only half of private facilities. Overall, only 9% of facilities have all HIV testing items – HIV testing capacity, 2020 national HIV testing and treatment guidelines, trained provider, visual and auditory privacy, and condoms available at site.

Infection Control

Among facilities with HIV testing capacity (N=57), 53% of facilities have latex gloves and 53% have soap and running water or alcoholbased hand disinfectant. However, only 10% have all infection prevention items.

Among facilities with laboratory HIV testing capacity (N=48), nearly all have latex gloves and soap and running water or alcohol-based hand disinfectant. Still, only 18% have all infection prevention items.

Management Practices and Training

The 2021 NHFS interviewed 783 HTC service providers about their training and supervision. Just 2% of providers received training related to HIV testing in the two years before the survey. Over half (56%) of providers received personal supervision during the six months before the survey.

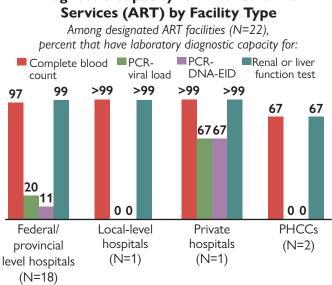
HIV Care and Support Services

HIV care and support services are not readily available at health facilities in Nepal-only 8% of all health facilities offer services such as treatment for opportunistic infections, fungal infections, or Kaposi's sarcoma; palliative care; nutritional rehabilitation; fortified protein supplementation; care for pediatric patients; preventive treatment for tuberculosis (TB) or opportunistic infections; general FP counseling; or condoms.

Among facilities offering HIV care and support services (N=125), 1 in 5 has a system for screening and testing HIV-positive clients for tuberculosis (TB). This is a major cause for concern because people living with HIV are at high risk for contracting TB. Most facilities providing HIV care and support services have male condoms (98%), IV solution with infusion set (89%), cotrimoxazole tablets to treat infections (77%), and pain management medication (76%). Fluconazole tablet or ointment (71%) for fungal infections and first-line treatment for TB (70%) are slightly less available.

Antiretroviral Therapy Services

Among hospitals and PHCCs (N=212), 13% offer antiretroviral therapy(ART) services such as prescribing ART, providing treatment follow-up services, or providing community-based services. Among ARTdesignated facilities (N=22), 81% have the 2020 national HIV testing and treatment guidelines. Laboratory diagnostic capacity is generally high for complete blood count (95%) and renal or liver function test (96%). However, only 19% of facilities offering ART services have the capacity to measure viral load using PCR and just 12% can perform PCR-DNA-EID. Overall, 6 in 10 designated ART facilities have the preferred first-line adult ART regimen available.



Diagnostic Capacity for Antiretroviral



Availability of Malaria Services

Overall, half of health facilities in Nepal offer malaria diagnosis and/or treatment services. Private facilities are twice as likely to offer malaria diagnosis or treatment compared to public facilities (90% vs. 45%).

Availability of Malaria Medicines and Commodities

The 2021 NHFS assessed the availability of antimalarials and commodities in the facilities offering the malaria diagnosis and/or treatment services (N=760). Merely 5% of facilities have the first-line ACT antimalarial available. Nearly all facilities have paracetamol tablets or injection. Less than 1 in 10 (9%) facilities had long-lasting insecticidal nets (LLINs) available on the day of the survey.

Guidelines and Diagnostics for Malaria Services

Among facilities offering malaria diagnosis and/ or treatment (N=760), 13% have the 2019 national malaria treatment protocol or algorithm for malaria. More than 7 in 10 (73%) facilities have

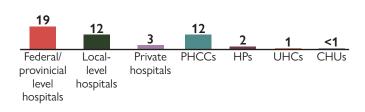
malaria rapid diagnostic test (RDT) kits while only 18% have malaria microscopy. Overall, 26% of facilities do not have any malaria diagnostics.

Malaria Diagnostic Capacity among Facilities Offering Curative Care for Sick Children

Only 3% of facilities offering curative care for sick children (N=1,554) have the capacity to diagnose malaria by having unexpired malaria RDT kits or a functioning microscope as well as staff member recently trained and malaria RDT protocol available in the facility. Federal/provinical level hospitals and PHCCs are more likely to have malaria diagnostic capacity than other facility types. By province, diagnostic capacity for malaria is most common among health facilities in Lumbini province (10%), followed by Madhesh province (3%).

Malaria Diagnostic Capacity by Facility Type

Among facilities offering curative care for sick children (N=1,554), percent that have malaria diagnostic capacity on the day of the survey



Malaria Service Readiness

Among facilities offering curative care for sick children (N=1,554), 7% have malaria treatment guidelines. Seventeen percent of facilities have the first line treatment medicine (ACT [Coartem], chloroquine, or primaquine tablets). Less than 1 in 5 facilities had staff trained in malaria diagnosis and/or treatment in the last two years.

The malaria service readiness index combines these indicators into one index, resulting in only 1% of facilities having malaria diagnostic capacity, malaria treatment guidelines, first-line medicine, as well as recently trained personnel. Malaria service readiness is highest in federal/ provincial-level hospitals (6%).

Non-communicable Diseases ↔

Diabetes Services

Nearly 3 in 4 (73%) health facilities in Nepal offer services for diabetes that include diagnosis, prescription of treatment, or management of diabetic patients, a dramatic increase from 21% in 2015. Among facilities offering services for diabetes (N=1,149), diagnostic capacity and availability of medicines are generally low. Only 23% of facilities have the capacity to test for blood glucose, 33% have capacity to test urine protein, and 32% have capacity to test for urine glucose. Various diabetes treatments are not readily available. Overall, 8% of facilities have injectable insulin, 66% have Metformin, and 59% have injectable glucose solution.

Cardiovascular Disease Services

The majority of health facilities in Nepal (90%) offer services for cardiovascular disease (CVD) including diagnosis, prescription of treatment, and management of patients with CVD, an increase from 73% in 2015. However, among facilities offering CVD services (N=1,411), only 7% have Thiazide diuretic for reducing high blood pressure, 18% have aspirin, and 28% have oxygen. Calcium channel blockers (62%) and Beta blockers (32%) are more widely available.

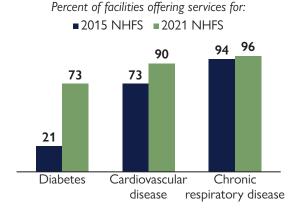
Chronic Respiratory Disease Services

Nearly all health facilities in Nepal (96%) offer support services for chronic respiratory disease including diagnosis, prescription of treatment, or management of patients with chronic respiratory diseases. Among facilities offering services for chronic respiratory disease (N=1,507), availability of essential medicines and commodities is relatively low, with the exception of salbutamol inhaler (93%).

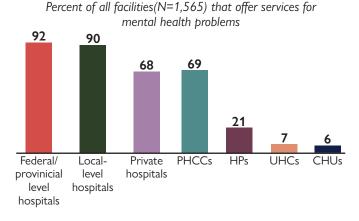
Mental Health Services

One quarter of all facilities in Nepal diagnose, prescibe treatment for, or manage patients with mental health problems. The availability of mental health services varies greatly by facility type, with 92% of federal/ provincial level hospitals offering mental health services, compared to just 6% of CHUs. Availability of essential medicines and commodities in facilities offering services for mental health problems (N=394) is relatively low. Half of facilities (50%) have Amitriptyline, 38% have injectable Diazepam, 32% have sodium valproate tablets, and 21% have Risperidone. The availability of essential medicines and commodities for mental health problems is higher in private facilities than in public facilities and higher in urban areas than in rural areas.

Trends in the Availability of Services for Non-Communicable Diseases



Availability of Mental Health Services by Facility Type



TUBERCULOSIS

Tuberculosis Services

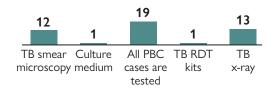
About 1 in 5 (23%) health facilities in Nepal offer any TB diagnostic services and 68% offer any TB treatment services. Overall, 71% of facilities offer any TB diagnostic and/or treatment services.

Among facilities offering TB diagnosis and/or treament services (N=1,250), 31% of facilities have the 2019 TB management guidelines on the diagnosis and treatment of TB and 1% have the 2020 National HIV testing and treatment guidelines. Few facilities offering TB services have the equipment to diagnose TB. Among facilities that offer any TB services, only 12% can perform TB smear microscopy and 13% have the capacity to conduct TB x-rays. Nearly 1 in 5 (19%) facilities report that all pulmonary bacteriologically confirmed (PBC) cases are tested. Federal and provincial level hospitals are more likely than other facility types to have these capacities. Four percent facilities offering any TB services have HIV diagnostic capacity, while 29% have a system for diagnosing HIV among TB clients. This system includes a record or register indicating TB clients who have been tested for HIV.

Among facilities offering TB diagnosis and/or treatment services (N=1,250), 7 in 10 (70%) have the treament regimen continuation phase HR for adults and 85% of facilities report following the treatment regimen. Availability of the treatment regimen continuation phase HR for adults is more than four times higher in public facilities than private facilities (75% vs. 17%) and twice as many public facilities report following the treatment regimen than private facilities (89% public vs. 40% private).

Tuberculosis Diagnostic Capacity

Among facilities offering TB diagnosis and/or treatment services (N=1,250), percent that have:



Availability of Medicines for Tuberculosis by Managing Authority

Among facilities offering TB diagnosis or treatment services (N=1,250), percent Treatment regimen- Treatment regimen is followed continuation phase HR for adult 89 85 75 70 40 17 Total Public Private (N=1,141) (N=110) (N=1,250)

BASIC SERVICE READINESS INDICATORS*

	Facility 1				
Availability of Basic Amenities for Client Services (%)	Federal/ provicial level hospitals	Local- level hospitals	Private hospitals	PHCCs	HPs
Regular electricity ¹	98	>99	>99	91	79
Improved water source ²	>99	>99	99	98	95
Visual and auditory privacy ³	94	95	96	96	91
Client latrine ^₄	98	95	98	96	89
Communication equipment ⁵	95	53	96	45	18
Emergency transport ⁶	96	94	95	89	79
Availability of Basic Equipment (%)					
Adult scale	96	100	94	97	95
Child scale ⁷	65	87	44	74	71
Infant scale ⁸	63	79	50	78	74
Digital Thermometer	96	>99	97	95	94
Stethoscope	99	>99	98	98	98
Blood pressure apparatus ⁹	96	98	98	96	96
Light source ¹⁰	98	92	98	95	93
Standard Precautions for Infection Control (%)					
Sterilization equipment ¹¹	99	83	99	92	83
Disinfectant ¹²	79	73	77	65	69
Syringes and needles ¹³	87	91	84	83	89
Soap and running water or else alcohol-based hand disinfectant	98	97	98	96	98 02
Latex gloves ¹⁴ Guidelines for standard precautions ¹⁵	96 21	97 10	96 15	87 °	93 °
	21	10	15	8	8
Laboratory Diagnostic Capacity (%)	. 00	00	02	00	10
Hemoglobin Blood glucose	>99 67	83 58	93 65	90 66	18 24
Malaria diagnostic test	93	58 91	82	80	24 33
Urine protein	93 93	73	82 89	86	21
HIV diagnostic test	67	10	29	8	2
Syphilis rapid diagnostic test	94	80	83	84	14
Urine pregnancy test	94	76	93	91	39
Availability of Tracer Medicines (%)					
Amoxicillin tablets/capsules (1st line antibiotic for adults)	94	>99	69	96	93
Amoxicillin syrup - pediatric (antibiotic for children)	75	75	55	65	60
Paracetamol tablet/injection (fever-reducer & analgesic for children)	99	98	88	99	98
Availability of Basic Clients Services (%)					
Child curative care	100	98	93	>99	>99
Child growth monitoring	85	74	39	98	98
Child vaccination ¹⁶	75	90	25	>99	99
Any modern methods of family planning ¹⁷	97	98	71	>99	>99
Antenatal care	98	98	90	>99	>99
Services for STIs	>99	>99	97	>99	88
All basic client services ¹⁸	74	71	20	97	86

¹Facility is connected to a central power grid and there has not been an interruption in power supply lasting for more than 2 hours at a time during normal working hours in the 7 days before the survey. ²Water is piped into facility or piped onto facility grounds, or else water from a public tap or standpipe, a tube well or borehole, a protected dug well, protected spring, or rain water, or bottled water and the outlet from this source is within 500 meters of the facility. ³A 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. ⁴The facility had a functioning flush or pourflush toilet, a ventilated improved pit latrine, or composting toilet. ⁵The facility had a functioning landline telephone, functioning facility-owned cellular phone, a private cellular phone that is supported by the facility or a functioning short wave radio available at the facility. ⁶The facility had a functioning ambulance or other vehicle for emergency transport that is stationed at another facility or that operates from another facility. ⁷A scale with gradation of 250 grams, or a digital standing scale with a gradation of 250 grams or lower where an adult can hold a child to be weighed. ⁸A scale with gradation of 100 grams, or a digital standing scale with a gradation of 100 grams where an adult can hold an infant to be weighed. *The full list of general service readiness indicators is found in Chapter 3 of the 2021 NHFS final report.

			Province								
UHCs	CHUs	Stand- alone HTCs	Province 1	Madhesh	Bagmati		Lumbini	Karnali	Sudur- pashchim	Total	
62	57	93	84	75	81	74	69	88	79	78	
88	84	98	93	90	96	99	94	96	91	94	
80	82	93	85	82	91	93	97	92	91	90	
84	88	95	93	69	92	94	94	92	93	89	
15	5	98	28	15	40	29	23	10	21	26	
73	71	78	72	78	92	76	88	66	76	80	
94	94	83	95	91	98	96	96	89	96	95	
61	62	22	63	62	67	55	76	67	81	67	
55	57	29	61	54	65	80	78	72	78	68	
94	952	76	93	91	98	95	97	95	89	94	
99	98	83	97	98	97	>99	99	96	>99	98	
98	97	81	95	93	96	98	98	94	98	96	
90	88	85	90	88	94	93	94	91	98	93	
75	66	78	79	71	89	92	80	76	89	82	
63	56	78	60	61	75	60	78	72	67	68	
92	94	81	77	82	96	90	92	93	95	89	
96	97	95	95	96	98	98	99	99	99	97	
93	96	90	85	96	96	97	93	95	95	94	
2	1	37	8	4	7	7	9	15	5	7	
5	2	51	33	15	35	20	27	14	28	26	
10	9	32	26	18	32	31	37	18	22	27	
16	7	10	27	42	30	42	50	18	37	36	
8	3	46	33	14	34	27	31	13	29	27	
1	<1	34	6	6	8	3	3	1	4	5	
4	2	59	30	16	27	16	23	12	21	22	
21	21	49	55	26	45	48	44	32	44	43	
98	95	na	92	83	92	92	97	93	96	92	
64	62	na	63	33	72	78	58	56	63	61	
98	98	na	97	97	98	>99	99	93	96	97	
>99	>99	na	99	99	>99	>99	99	>99	>99	99	
84	83	na	90	88	88	93	93	95	89	91	
79	72	na	87	91	85	90	89	93	91	89	
>99	>99	na	97	97	96	99	98	>99	>99	98	
96	96	na	99	99	98	97	98	98	99	98	
72	68	na	76	82	82	90	95	88	95	86	
52	48	na	66	73	66	79	84	82	82	75	
	-			-		-					

⁹A digital blood pressure machine or a manual sphygmomanometer with a stethoscope. ¹⁰A spotlight source that can be used for client exam or a functioning flashlight. ¹¹Facility 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. ¹²Chlorine-based or other Nepal-specific disinfectants used for environmental disinfection available in the general outpatient area. ¹³Single-use standard disposable syringes with needles or else auto-disable syringes with needles. ¹⁴Non-latex equivalent gloves acceptable. ¹⁵Infection Prevention and health care waste management reference manual 2015/2020 observed on the day of visit. ¹⁶Facility routinely provides BCG, pentavalent, polio, and measles-rubella (MR) vaccinations at the facility. ¹⁷Facility provides, prescribes, or counsels clients on any of the following methods of family planning: combined oral contraceptive pills, progestin-only injectables, implants, IUCDs, male condom, male sterilization, or female sterilization. ¹⁸Includes outpatient curative care for sick children, child growth monitoring, child vaccination services, any modern method of family planning, antenatal care, and services for STIs.







