

**Kenya
Service Provision
Assessment Survey
2010**

**Preliminary
Report**



Ministry of Medical Services
Ministry of Public Health and Sanitation

Kenya Service Provision Assessment Survey 2010

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National Coordinating Agency
for Population and Development
Nairobi, Kenya

Ministry of Medical Services
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Kenya National Bureau of Statistics
Nairobi, Kenya

ICF Macro
Calverton, Maryland USA

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This report presents preliminary findings of the 2010 Kenya Service Provision Assessment Survey (2010 KSPA) which was implemented by the National Coordinating Agency for Population and Development in collaboration with the Ministry of Medical Services, the Ministry of Public Health and Sanitation, and the Kenya National Bureau of Statistics. ICF Macro provided technical assistance. The 2010 KSPA is part of the worldwide MEASURE DHS project which assists countries in the collection of data to monitor and evaluate population, health, and nutrition programmes. The survey was funded by the United States Agency for International Development (USAID), United Nations Population Fund (UNFPA), United Nations Children's Fund (UNICEF), the British Department for International Development (DfID) and the Danish International Development Agency (DANIDA) provided the financial support.

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ABBREVIATIONS

AMDD	Averting Maternal Death and Disability
AIDS	Acquired Immune Deficiency Syndrome
AMTSL	Active Management of Third Stage of Labour
ANC	Antenatal Care
ART	Antiretroviral Therapy
ARV	Antiretroviral
BCG	Bacille Calmette Guerin
BSN	Bachelor of Science in Nursing
CS	Caesarean Section
CSS	Care and Support Services
D&C	Dilatation and Curettage
DOT	Direct Observation of Treatment
DOTS	Direct Observed Therapy-Short course
DPT-HB	Diphtheria, Pertussis, Tetanus, and Hepatitis B
FBO	Faith-Based Organisation
FP	Family Planning
HIV	Human Immunodeficiency Virus
HLD	High-Level Disinfection
IMCI	Integrated Management of Childhood Illnesses
INH	Isoniazid
IPT	Intermittent Prophylactic Treatment
IUD	Intrauterine Contraceptive Device
IV	Intravenous
MCH	Maternal and Child Health
KNBS	Kenya National Bureau of Statistics
NCAPD	National Coordinating Agency for Population and Development
NGO	Non-governmental Organisation
OI	Opportunistic Infection
ORC	Opinion Research Corporation
PEP	Post-Exposure Prophylaxis
PEPFAR	President's Emergency Fund for AIDS Relief
PMTCT	Prevention of Mother-to-Child Transmission (of HIV)
SP	Sulfadoxine-pyrimethamine
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
TB	Tuberculosis
KDHS	Kenya Demographic and Health Survey
KSPA	Kenya Service Provision Assessment
TT	Tetanus Toxoid
USAID	United States Agency for International Development
VCT	Voluntary Counselling and Testing

I. INTRODUCTION

1.1 Background

The 2010 Kenya Service Provision Assessment (KSPA 2010) is the third survey of its kind to be conducted in Kenya. The first one was conducted in 1999, and the second was conducted in 2004. This SPA was undertaken by the National Coordinating Agency for Population and Development (NCAPD) in collaboration with the Ministry of Public Health and Sanitation (MOPH&S), the Ministry of Medical Services (MOMS), and the Kenya National Bureau of Statistics (KNBS). Technical support for the survey was provided by ICF Macro under the MEASURE DHS Project. The United States Agency for International Development (USAID), United Nations Population Fund (UNFPA), United Nations Children's Fund (UNICEF), the British Department for International Development (DfID) and the Danish International Development Agency (DANIDA) provided the financial support. A steering committee and a technical committee, each comprised of staff from NCAPD, MOPH&S, MOMS, and KNBS, were constituted to oversee all policy and technical issues related to the survey.

The objective of the KSPA 2010 was to collect information on the delivery of health care services in Kenya and to examine the preparedness of facilities to provide quality health services. The priority health services included in the 2010 KSPA were child health, maternal and newborn care, family planning, sexually transmitted infections, HIV and AIDS, and TB. The 2010 KSPA also included, for the first time, a module on the observation of deliveries. In addition, the survey sought the views of community members on the provision of services by health facilities.

This preliminary report presents provisional results on facility infrastructure and services delivery based on the information that was collected from the health facilities. This information will help health programme managers and policy makers to prioritise interventions that will enhance the provision of quality health services. A comprehensive report on the survey findings will be published in 2011. That report will indicate trends over time.

1.2 Survey Objectives

The objectives of the 2010 KSPA were to:

- Assess the preparedness of health facilities in Kenya to provide high quality services in the areas of child and maternal health, family planning, and prevention of infectious disease.
- Provide a comprehensive body of information on the performance of different types of facilities that provide essential health care services.
- Identify gaps in the support services, resources, and processes that are used to provide health services and that may negatively affect the ability of facilities to provide quality services.
- Describe the processes used to provide essential health care services and the extent to which accepted standards for quality service provision are adhered to.
- Compare the findings by region, facility type, and management authority.
- Describe the extent to which clients understand what they must do to follow up on the service received so that the best health outcome is achieved.

- Provide information on the capacity of health facilities to provide for clients' basic preventive and diagnostic care, advanced care and support services, and record keeping systems for monitoring HIV/AIDS services.

II. SURVEY IMPLEMENTATION

2.1 Sample Design and Implementation

The facilities included in the survey are a sample of all facilities that offer delivery services or outpatient child, maternal or reproductive health services in Kenya. This sample was carefully selected to ensure that the survey results could be analyzed separately for each province in the country. The sample was also selected so that facilities operating under different types of management (e.g., government, private for profit, and non-governmental not-for-profit) could be compared at a national level. To ensure that the sample adequately represented the actual mix of health facilities in the country, each team visited all facilities selected for the SPA in the geographical areas assigned to them. Tables 2.1 and 2.2 present information on the facilities sampled and the distribution of facilities surveyed, by background characteristics.

Background characteristic	Percent distribution of result of contact						Total percent	Number of facilities
	Complete	Respondent not available	Refused	Duplicates an existing facility	Closed	Unreachable		
Type of Facility								
Hospital	100	0	0	0	0	0	100	253
Health Centre	100	0	0	0	0	0	100	101
Maternity	100	0	0	0	0	0	100	52
Clinic	99	0	0	1	0	0	100	104
Dispensary	97	1	0	0	1	2	100	152
Stand-alone VCT	98	0	0	0	2	0	100	41
Managing Authority								
Government	99	0	0	0	0	1	100	351
NGO	100	0	0	0	0	0	100	38
Private (for profit)	99	0	0	0	0	0	100	219
Faith-based organisation	98	0	1	0	1	0	100	95
Province								
Nairobi	99	0	1	0	0	0	100	90
Central	99	0	0	0	1	0	100	92
Coast	100	0	0	0	0	0	100	90
Eastern	99	1	0	0	0	0	100	91
North Eastern	95	0	0	0	0	5	100	59
Nyanza	99	0	0	0	1	0	100	91
Rift Valley	99	0	0	1	0	0	100	101
Western	100	0	0	0	0	0	100	89
Total	99	0	0	0	0	0	100	703

Background characteristic	Percent distribution of facilities	Number of facilities	
		Weighted	Unweighted
Type of Facility			
Hospital	7	51	252
Health Centre	11	80	101
Maternity	2	17	52
Clinic	29	203	103
Dispensary	49	340	147
Stand-alone VCT	1	5	40
Managing Authority			
Government	50	345	347
NGO	3	24	38
Private (for profit)	34	237	217
Faith-based organisation	13	89	93
Province			
Nairobi	6	45	89
Central	18	125	91
Coast	12	81	90
Eastern	17	118	90
North Eastern	3	24	56
Nyanza	12	83	90
Rift Valley	25	175	100
Western	6	44	89
Total	100	695	695

As shown in Table 2.1, data were successfully collected from 99 percent of the 703 facilities that had been sampled for the assessment. Eight facilities could not be surveyed because they were either inaccessible or there was nobody available to respond to the assessment. Half of facilities in the country (using adjusted/weighted proportions to reflect actual facility distribution in Kenya) are dispensaries (49 percent) followed by clinics (29 percent). Stand-alone voluntary counselling and testing facilities (VCTs) (1 percent) and hospitals (7 percent) are the fewest in number. Half of the health facilities are managed by the government and about one-third are managed by the private sector. Rift Valley province has the largest proportion of the facilities (25 percent), compared with Western (6 percent), Nairobi (6 percent), and North Eastern (3 percent) provinces, which have the smallest proportions of facilities.

2.2 KSPA Data Collection Instruments

To achieve the objectives of the survey and to capture information from the different categories, data were collected using the following instruments:

- **Facility Audit/Inventory** modules designed to obtain information on how well prepared the facilities were. These modules were used for each of the priority services. The inventory modules collected information on the availability of specific items that related to the services that were being assessed. Examples of the inventory modules and their intended purposes are listed here:
 - The **health management information systems (HMIS)** questionnaire was used to collect information on health facility policies and practices for the gathering and reporting of data on the services provided to patients.
 - The **laboratory and other diagnostics** questionnaire collected information on the laboratory diagnostic capacity of the facility.

- The **medicines and supplies** questionnaire gathered information on medicines and supplies available in the facility and the systems used to store and monitor these medicines and supplies.
- The **tuberculosis (TB)** questionnaire collected information on TB diagnosis and treatment.
- **Specific HIV/AIDS** questionnaires collected information on counselling and testing, antiretroviral treatment, and prevention of mother-to-child transmission of HIV.
- A **provider questionnaire** was used to solicit information from a sample of health service providers on their qualifications (training, experience, and continuing education), supervision they had received, and their perceptions of the service delivery environment.
- **Observation protocols** were used in consultations and examinations of sick children, antenatal care, deliveries, family planning sessions, and services for sexually transmitted infections (STIs). This information was collected from a sample of clients seeking health services in the facilities that were surveyed.
- **Client exit interviews** were conducted with clients whose consultations had been observed. They were designed to assess the client's understanding of the consultation/examination.

Other instruments used for the assessment included:

- A **focus group discussion guide** to administer focus groups in selected communities to groups of women with children below the age of 5 years. The selected communities were near the sampled facilities. The focus groups elicited input from these women on availability, use, and quality of health services.
- **In-depth interviews** conducted with community health workers and community midwives around the facilities sampled for the assessment.

2.3 Training and Data Collection

Pretest

The pretest for the 2010 KSPA took place in Nakuru between 27 October and 13 November 2009. Fourteen research assistants were recruited, a group consisting of eight health workers and six social scientists. During the pretest, health facilities within Nakuru and the surrounding districts were surveyed for three days to test and refine the survey instruments. Experts in the various areas being assessed facilitated the training of the research assistants. After the pretest, the instruments were finalised and printed for the main data collection.

Training and Survey

The main training for the 2010 KSPA took place in Nakuru in three phases. The first phase of the training was conducted from 30 November to 12 December 2009, the second phase from 5 to 10 January 2010, and the third phase from 13 to 20 January 2010. NCAPD recruited 78 research assistants for the survey. They joined another 10 research assistants, recruited through Jhpiego¹ specifically to collect data on

¹ Jhpiego is an international non-profit health organisation affiliated with Johns Hopkins University. The name is one word, not an acronym.

deliveries. The 10 research assistants from Jhpiego and 10 from among the original 78 recruited by NCAPD participated in the second phase of the training, which focused on the observation of deliveries.

The training used various methodologies, including classroom lectures/discussion, practical demonstrations, mock interviews and field practices. The participants were also given periodic written tests and homework to conduct mock interviews among themselves using the survey tools. All training helped to ensure that the research assistants were competent to accurately and thoroughly fill out the survey tools during the actual data collection.

A staff member from ICF Macro, technical facilitators from MOPH&S and MOMS, as well as staff from NCAPD and KNBS, conducted the training. Afterwards, 16 teams were formed, each consisting of a team leader, three to four interviewers, and a driver. Ten sub-teams of interviewers (with two health workers in each) specialised in aspects related to observation of deliveries in sampled health facilities worked in coordination with the 16 teams of interviewers. Each of the 16 teams was assigned a regional coordinator responsible for supervising activities of the team. Data collection began 22 January 2010 and finished in May 2010. Fieldwork supervision was coordinated by NCAPD, with a coordination team drawn from MOMS, MOPH&S, NCAPD, and KNBS, that periodically visited the teams to review their work and monitor data quality.

2.4 Data Analysis

The following conventions were observed during the analysis of the KSPA 2010 data:

- **Assessing the availability of items:** Unless specifically indicated, the 2010 KSPA considered only those items observed by the interviewers themselves to be available.
- **Observations:** Many facilities provide routine services (e.g., taking blood pressure) separate from the actual consultations. Often a period of time elapses between these events and when the primary provider assesses the client. If these services were observed outside the consultation room on the day of the survey, the client was assumed to have received these services. Where this system is used, multiple providers contribute to the services received by each client. The provider who ultimately diagnoses and prescribes, however, is defined as the primary provider.

2.5 Facility audit

The facility audit collected information on the availability of specific items (including their location and functional status), components of support systems (e.g., logistics, maintenance, and management), and facility infrastructure, including the service delivery environment. Hence, the person most knowledgeable about the organisation of the facility and/or the most knowledgeable provider of each service was interviewed by SPA data collectors. If another provider needed to give some specific information, that provider was invited (or visited, if appropriate) and questioned about that information.

2.6 Observation of client services

Once in a facility, interviewers tried to observe a sample of consultations for their respective service component (ANC, FP, sick child, STI, or delivery) as they occurred. Table 2.3 presents the number and percent distribution of observations of consultations (actual and weighted) of the services component. Most of the observations were of sick children (2,016) and antenatal care clients (1,409). Clients for STI services (164) were the fewest in number. A total of 626 deliveries were observed.

Table 2.3 Distribution of observed consultations

Percent distribution of observed consultations and number of observed consultations for selected types of services, by type of facility, Kenya SPA 2010

Type of facility	Percent distribution of observed consultations	Number of observed consultations	
		Weighted	Unweighted
OUTPATIENT CARE FOR SICK CHILDREN			
Hospital	25	497	1,016
Health Centre	19	392	353
Maternity	1	15	63
Clinic	8	163	123
Dispensary	47	949	461
Total	100	2,016	2,016
FAMILY PLANNING			
Hospital	35	351	633
Health Centre	25	251	181
Maternity	1	11	27
Clinic	9	95	46
Dispensary	30	301	123
Total	100	1,010	1,010
ANTENATAL CARE			
Hospital	36	510	872
Health Centre	27	380	258
Maternity	1	18	53
Clinic	5	69	42
Dispensary	31	431	184
Total	100	1,409	1,409
SEXUALLY TRANSMITTED INFECTIONS			
Hospital	27	44	120
Health Centre	11	18	13
Maternity	2	4	6
Clinic	13	22	9
Dispensary	47	76	16
Total	100	164	164
DELIVERIES			
Hospital	83	521	577
Health Centre	11	67	24
Maternity	4	28	23
Clinic	0	0	0
Dispensary	2	10	2
Total	100	626	626

III. RESULTS

3.1 Availability of Basic Services

The availability of a basic package of maternal, child, and reproductive health services and the frequency with which these services are offered influence how clients use these services. The basic types of services are curative care for children, diagnosis and treatment of STIs, temporary methods of family planning, antenatal care (ANC), child immunisation, and growth monitoring. Table 3.1 provides both detailed and aggregate information on the availability of basic services by type of facility².

Background characteristic	Type of Facility					Total percentage
	Hospital	Health Centre	Maternity	Clinic	Dispensary	
Services						
Curative care for children	100	100	95	94	97	97
Diagnosis and treatment of STIs	98	100	94	85	97	94
Temporary methods of FP	91	86	88	81	94	89
Antenatal care	95	99	93	41	84	74
Child immunisation	93	95	78	29	81	68
Growth monitoring	95	95	82	43	84	74
Packages of services available						
All basic services at any frequency ¹	85	81	69	21	73	60
Facility-based 24-hour delivery of services	94	72	79	2	11	23
At least one qualified staff person assigned, employed or seconded ²	100	100	98	99	97	98
All services, minimum frequency ³	82	77	59	20	68	56
All services, minimum frequency, 24-hour delivery services, and at least one qualified staff person	80	55	58	2	10	19
Number of facilities	51	80	17	203	340	690

The basic services assessed by the 2010 KSPA are each available, on average, in about 70 percent or more of all Kenyan facilities. For example, STI services and curative care for sick children are available in 94 and 97 percent, respectively, of all facilities; the other services are each available in approximately 4 out of 5 facilities, with the exception of clinics. At clinics, antenatal care, child immunisation, and growth monitoring are, on average, each available in fewer than 45 percent of all locations. A larger proportion of hospitals and health centres offer antenatal care, child immunisation, and growth monitoring services than dispensaries. These findings are somewhat surprising and run counter to expectations.

Almost all facilities have at least one qualified provider assigned or seconded to, or employed by the facility.

² The availability of the basic services in stand-alone VCT facilities is generally low because these facilities are specialised service delivery points, and they are not included in this analysis.

In general, four out of five hospitals and health centres offer all basic services. If minimum frequency of services, 24-hour delivery services, and presence of at least one qualified staff person are added to the criteria, four out of five hospitals and approximately half of the health centres and maternity facilities are able to offer this full package. Some facility types, because of the nature of their specialised services or the lack of complexity of their systems (e.g., dispensaries), are naturally less likely to offer the full package of services.

3.2 Infection Control

Hospital-acquired infections, otherwise known as nosocomial infections, often complicate the delivery of health care in facilities worldwide. Strict control measures are necessary to prevent the spread of such infections. The 2010 KSPA assessed the availability of (1) an adequate final waste disposal system for needle sharps and infectious waste, and (2) soap and running water for hand washing, hand disinfectant, latex gloves, a sharps box, disinfecting solution, and a waste receptacle in service delivery points where re-usable equipment, clients or providers might be contaminated by blood or other bodily fluids. For a facility to meet infection control standards according to the KSPA definition, the latter items must be available at all service areas. Tables 3.2.1 and 3.2.2 provide information on the assessed infection control items.

Table 3.2.1 Elements for preventing nosocomial infections

Percentage of facilities with the indicated elements for infection control in assessed service sites, by type of facility, managing authority, and province, Kenya SPA 2010

Background characteristic	Percentage of facilities with indicated items present in any relevant service area										Number of facilities
	Running water	Soap	Running water and soap	Hand disinfectant	Running water and soap or hand disinfectant	Latex gloves	Sharps box	Disinfecting solution	Waste receptacle	Percentage of facilities with functioning equipment for sterilisation or HLD process	
Type of Facility											
Hospital	99	97	97	100	100	100	99	97	61	68	51
Health Centre	98	95	93	100	100	100	100	93	62	45	80
Maternity	94	82	81	100	100	98	98	91	37	55	17
Clinic	89	84	79	95	98	94	89	80	22	17	203
Dispensary	81	82	73	100	100	99	100	88	22	16	340
Stand-alone VCT	97	93	90	100	100	97	100	87	45	2	5
Managing Authority											
Government	81	86	77	100	100	99	100	88	29	26	345
NGO	79	59	54	100	100	90	100	85	45	16	24
Private (for profit)	92	85	81	96	98	95	90	82	25	21	237
Faith-based organisation	97	90	87	100	100	100	100	96	43	30	89
Province											
Nairobi	93	95	91	100	100	97	100	86	68	34	45
Central	100	90	90	92	96	100	96	96	28	28	125
Coast	87	77	74	100	100	98	96	96	24	29	81
Eastern	85	87	76	100	100	96	92	63	33	17	118
North Eastern	83	81	74	100	100	96	97	92	19	15	24
Nyanza	93	85	82	100	100	97	100	94	32	26	83
Rift Valley	77	83	72	100	100	98	98	86	27	19	175
Western	81	87	76	100	100	96	99	95	17	35	44
Total	87	85	79	99	99	98	97	87	30	24	695

Table 3.2.2 Infection control

Percentage of facilities that have all items for infection control in *all* and *any* service delivery areas, Kenya SPA 2010

Background characteristic	Percentage with all items for infection control in <i>all</i> service delivery areas ¹	Percentage with all items for infection control in <i>any</i> service delivery area ¹	Number of facilities	Percentage with all items for infection control in tuberculosis service delivery area ²	Number of facilities offering tuberculosis services
Type of Facility					
Hospital	12	93	51	37	47
Health Centre	21	79	80	45	68
Maternity	25	78	17	48	7
Clinic	51	66	203	67	38
Dispensary	35	70	340	60	131
Stand-alone VCT	66	82	5	52	1
Managing Authority					
Government	30	72	345	51	189
NGO	20	49	24	11	11
Private (for profit)	50	70	237	73	40
Faith-based organisation	28	84	89	57	50
Province					
Nairobi	39	78	45	46	20
Central	54	82	125	72	47
Coast	47	77	81	58	37
Eastern	20	51	118	34	52
North Eastern	24	78	24	17	5
Nyanza	22	81	83	47	49
Rift Valley	36	70	175	62	52
Western	42	69	44	60	29
Total	36	72	695	53	290

¹ Soap and running water or hand disinfectant, sharps box, disinfecting solution, and latex gloves in child health, family planning, antenatal care, delivery, and STI service delivery areas

² All areas where HIV/AIDS or tuberculosis services were assessed; may include some MCH/RH areas as well

Table 3.2.1 indicates that running water and soap, or hand disinfectant (99 percent); latex gloves (98 percent); and a sharps box (97 percent) are the most widely available infection control elements in the health facilities. Waste receptacles with a plastic liner and lid (30 percent) and functioning equipment for sterilisation or high-level disinfection (HLD) processing (24 percent) are the least available infection control elements.

Table 3.2.2 shows that overall, 36 percent of the health facilities have all items for infection control in *all* assessed service delivery areas, while 72 percent have all items for infection control in at least one service area. Half of facilities offering TB services have all items for infection control in these service areas. Stand-alone VCTs (66 percent) and clinics (51 percent) are the facility types most likely to have all infection control items in all service delivery areas, probably because they have fewer service sites (compared with hospitals, for example). Privately managed facilities (50 percent) are more likely than facilities managed by other authorities to meet that criterion. Provincial variations also exist – over half of facilities in Central province have all items for infection control in all service delivery areas, while only 20 percent of facilities in Eastern province have all the items.

3.3 Child Health

The 2010 KSPA used the Integrated Management of Childhood Illnesses (IMCI) guidelines as the basis for assessing the provision of child health services. These guidelines are based on two major principles: (1) that all sick children be routinely assessed for major symptoms (fever, cough, or difficult breathing; diarrhoea; ear pain or discharge; nutritional and immunisation status; feeding problems; and other potential

problems) and (2) that all children be examined for *general danger signs* that indicate the need for immediate referral or admission to a hospital. Observations of sick child consultations provided the information needed to determine whether providers were adhering to standards for providing quality services.

Table 3.3 Availability of child health services
Percentage of facilities offering the indicated child health services at the facility, by background characteristics, Kenya SPA 2010

Background characteristic	Percentage of facilities that provide:				Number of facilities	Percentage that provide paediatric AIDS care	Number of facilities offering sick child services
	Outpatient curative care for sick children	Growth monitoring	Childhood immunisation	All basic child health services			
Type of Facility							
Hospital	100	95	93	92	51	84	50
Health Centre	100	95	95	93	80	55	80
Maternity	95	82	78	78	17	32	16
Clinic	94	43	29	29	203	13	190
Dispensary	97	84	81	80	340	14	330
Managing Authority							
Government	97	89	88	86	345	30	335
NGO	87	73	73	73	24	30	21
Private (for profit)	94	47	34	34	237	15	223
FBO	98	83	79	79	89	27	87
Province							
Nairobi	86	68	68	63	45	41	38
Central	96	58	45	45	125	15	120
Coast	88	57	57	55	81	25	72
Eastern	100	80	65	65	118	23	118
North Eastern	96	66	63	63	24	12	23
Nyanza	100	95	93	93	83	46	82
Rift Valley	96	76	75	74	175	16	169
Western	98	90	87	87	44	38	43
Total	96	74	68	67	690	25	666

As evident in Table 3.3, outpatient curative child health services are available in almost all facilities. Growth monitoring and child immunisation services are less widely available. Only two-thirds of facilities have the entire basic array of child health services, (i.e., growth monitoring and childhood immunisation in addition to sick child services). The table also shows that only a quarter of the facilities report that they provide paediatric AIDS care services. Hospitals and health centres (92 and 93 percent, respectively) are the facilities most likely to provide all basic arrays of child health services. Government (86 percent) is the managing authority with the highest proportion of facilities providing all basic child health services. Availability by province varies widely, from 93 percent of facilities in Nyanza province offering all basic child health services to only 45 percent of facilities in Central province.

Child Vaccines

The availability of child vaccines was assessed only in facilities reporting that they provide immunisation services and also store vaccines. Detailed information on vaccine availability on the day of the survey is presented in Table 3.4.

Table 3.4 Availability of child vaccines

Among facilities offering child immunisation services and routinely storing vaccines, the percentage with the indicated child vaccine (validly dated) observed on the day of the survey, by background characteristics, Kenya SPA 2010

Background characteristic	Percentage of facilities offering immunisation services and storing vaccines and where unexpired vaccine was observed										Number of facilities offering child immunisation services and storing vaccines
	BCG	Polio	DPT or Pentavalent ¹	Measles	All basic child vaccines ² available	Vitamin A in area with vaccines	Tetanus toxoid	Anti-rabies vaccine	Yellow fever vaccine	Anti-snake venom	
Type of Facility											
Hospital	97	94	98	98	90	95	100	26	4	25	47
Health Centre	96	87	98	96	79	92	97	12	2	12	75
Maternity	100	97	100	97	94	98	100	10	0	0	12
Clinic	94	94	100	100	88	91	100	15	0	2	56
Dispensary	93	91	96	93	82	95	97	6	0	9	237
Managing Authority											
Government	96	89	96	93	83	94	97	10	0	13	269
NGO	71	96	100	100	68	100	100	4	0	4	15
Private (for profit)	91	95	99	99	87	90	100	15	1	3	74
FBO	97	92	100	98	87	95	100	8	3	7	69
Province											
Nairobi	91	100	99	99	91	90	99	9	1	0	29
Central	96	100	100	95	91	100	99	1	0	4	56
Coast	100	93	100	100	93	95	100	8	0	9	45
Eastern	88	91	95	95	83	100	91	22	0	27	73
North Eastern	98	99	99	90	89	82	100	8	0	22	14
Nyanza	96	92	100	100	88	96	100	6	0	3	61
Rift Valley	95	84	94	89	73	88	99	9	2	5	120
Western	92	86	100	98	80	94	100	18	0	17	27
Total	94	91	97	95	84	94	98	10	1	10	426

¹ DPT + Hepatitis B + Haemophilus Influenza B

² BCG, polio, Pentavalent, and measles

Individually, BCG, polio, DPT (or Pentavalent), and measles vaccines were available on the day of the survey in more than 90 percent of the assessed facilities. However, collectively, only a few more than 8 in 10 facilities offering immunisation services and storing vaccines had all the basic child vaccines available in the facility on the day of the survey. NGO facilities were the least likely health facilities to have all the basic child vaccines in stock (68 percent) compared with private for-profit and faith-based organisation (FBO) facilities (each 87 percent). Coast, Central, and Nairobi provinces had the highest availability of all the basic child vaccines while Rift Valley province had the least. Tetanus toxoid was almost universally available in these facilities. Anti-rabies (10 percent) and yellow fever (1 percent) vaccines as well as anti-snake venom (10 percent) were rarely available in the health facilities.

Assessment of Signs and Symptoms in Sick Children

Table 3.5 presents information on assessment of sick children during encounters with providers. Fever was the most commonly assessed or discussed symptom (assessed or discussed in 89 percent of all sick child consultations), followed by cough/difficult breathing (82 percent of all sick child consultations). Symptoms related to ear problems were the least often assessed or discussed (12 percent of consultations). Assessment or discussion of all four major symptoms (cough or difficulty breathing, diarrhoea, fever, and ear problems) occurred on average in only 7 percent of all sick child consultations. All four symptoms were most likely to be assessed in maternity facilities; for example, 25 percent of consultations taking place in maternity facilities had all four symptoms assessed or discussed, compared with only 6 and 7 percent of consultations taking place in health centres and hospitals, respectively.

Physical Examinations of Sick Children

Table 3.5 shows that the most commonly performed physical examination during the sick child consultations was the assessment of fever (91 percent of consultations), either by touching or use of a thermometer. Fever was assessed in all sick child consultations taking place in maternity facilities. Fever was also assessed in a majority of consultations taking place in other types of health facilities. Assessment of sick children for anaemia, either by looking at the palms or conjunctiva, was done in 61 percent of all observed sick child consultations, while counting of respiratory rate was done in just one-fourth of consultations. The assessment of dehydration, ear problems, and oedema was done in 20, 13, and 9 percent of the consultations, respectively. The physical assessment of sick children for all the main symptoms (dehydration, anaemia, cough or difficult breathing, diarrhoea, fever, oedema, and ear problem) was done in only 2 percent of the consultations.

Table 3.5 History and examinations conducted for observed sick child assessment

Percentage of observed consultations with sick children for whom the indicated assessment, examination, or intervention was a component of their consultation, by type of facility, Kenya SPA 2010

Components of consultation	History: assessment of symptoms					Physical examination							Number of observed children	
	Cough or difficult breathing	Diarrhoea	Fever	Ear problems	All four symptoms ¹	Assessed fever	Counted respirations	Assessed for dehydration	Assessed for anaemia	Assessed ear	Checked for pedal oedema (press both feet)	Undressed to examine		All physical checks ²
Type of Facility														
Hospital	85	51	89	11	7	92	27	22	68	15	7	25	2	497
Health Centre	78	47	90	13	6	87	30	20	58	13	10	21	1	392
Maternity	84	45	87	30	25	100	30	28	66	18	14	32	11	15
Clinic	83	48	90	19	11	96	37	25	73	24	14	52	6	163
Dispensary	81	45	88	10	6	92	20	18	57	11	8	23	2	949
Managing Authority														
Government	83	47	90	12	7	90	24	20	59	11	8	23	2	1,477
NGO	69	27	98	3	1	100	35	11	93	30	3	56	2	68
Private (for profit)	83	46	83	16	8	97	28	22	71	22	13	27	2	222
FBO	78	51	84	9	6	91	24	23	61	13	10	34	3	249
Province														
Nairobi	85	41	82	9	4	99	33	16	59	17	4	22	1	174
Central	82	40	82	10	7	90	35	19	43	7	4	17	1	163
Coast	87	45	85	16	14	89	26	27	58	18	14	52	7	230
Eastern	85	43	84	11	4	79	23	17	40	16	10	35	3	309
North Eastern	76	32	83	7	2	90	2	9	39	16	0	12	0	80
Nyanza	74	50	95	11	7	96	29	21	74	18	14	32	1	403
Rift Valley	88	58	93	14	7	96	24	27	77	9	7	14	2	432
Western	72	43	90	11	7	90	17	10	66	5	3	10	0	225
Total	82	47	89	12	7	91	25	20	61	13	9	26	2	2,016

¹ Assessed cough, diarrhoea, fever, and ear symptoms.

² Counted respiratory rate, assessed presence of fever (either measured or by touch), assessed presence of anaemia (either palms or mucosa), auscultate, checked ear, checked feet (pedal oedema), and checked musculature.

3.4 Family Planning

Tables 3.6 and 3.7 provide detailed information on the availability and quality of family planning services, as well as information on systems to support the provision of quality family planning services.

Table 3.6 Availability of family planning services

Percentage of all facilities offering the indicated methods of family planning, by type of facility, managing authority, and province, Kenya SPA 2010

Background characteristic	Temporary methods of family planning					Number of facilities
	Percentage offering any temporary modern method ¹	Percentage offering natural/rhythm method ²	Percentage offering any temporary modern method of FP or natural methods ³	Percentage offering male or female sterilisation ⁴	Percentage performing male or female sterilisation	
Type of Facility						
Hospital	85	75	91	67	46	51
Health Centre	83	64	86	33	20	80
Maternity	88	63	88	47	31	17
Clinic	80	44	81	18	3	203
Dispensary	89	59	94	22	2	340
Stand-alone VCT	11	11	11	3	0	5
Managing Authority						
Government	96	64	97	33	11	345
NGO	83	34	83	21	6	24
Private (for profit)	83	46	84	21	7	237
FBO	44	58	69	12	3	89
Province						
Nairobi	63	40	64	27	10	45
Central	89	33	90	9	6	125
Coast	75	72	82	26	7	81
Eastern	79	45	87	12	5	118
North Eastern	67	67	67	65	1	24
Nyanza	93	79	96	42	14	83
Rift Valley	92	64	95	27	8	175
Western	93	60	93	46	18	44
Total	85	56	88	26	8	695

¹ Facility provides, prescribes, or counsels clients on any of the following: contraceptive pills (combined or progestin-only), injectables (combined or progestin-only), implants, intrauterine contraceptive devices (IUCDs), or condoms (male or female).

² This includes the provision or prescription of, or counselling on the moon beads for, the 'standard days method' (SDM).

³ Facility provides, prescribes, or counsels clients on any of the following: contraceptive pills (combined or progestin-only), injectables (combined or progestin-only), implants, intrauterine contraceptive devices (IUCDs), condoms (male or female), or natural methods (including moon beads for SDM).

⁴ Providers can discuss this option with clients and subsequently refer clients elsewhere for the service without necessarily providing the service.

Availability

Eighty-five percent of facilities in Kenya offer temporary modern family planning methods. Practically all government-managed facilities (96 percent) and NGO-managed facilities and privately-managed facilities (83 percent each) offer a temporary modern family planning method. Only a relatively small percentage (44 percent) of faith-based organisations, however, offers modern family planning methods.

At the provincial level, the vast majority of facilities in the Nyanza (93 percent), Rift Valley (92 percent), and Western (93 percent) provinces offer temporary modern family planning services, while smaller proportions of facilities in North Eastern (67 percent) and Nairobi (63 percent) provinces offer these methods.

Although about a quarter of the health facilities offer male or female sterilisation services (that is, providers in these facilities discuss this option whether or not they refer clients elsewhere), only 8 percent actually perform the services.

Infrastructure, Visual Aids, Guidelines

Some basic infrastructure and resources need to be in place to ensure that clients get the best possible service. These include privacy, visual aids, and guidelines (Table 3.7). Nine out of 10 facilities that offer family planning methods have both visual and auditory privacy for family planning consultations; the proportion ranges from 90 percent of dispensaries to 98 percent of maternity facilities and clinics. Written family planning guidelines, on the other hand, are less widely available, found in only a third of the facilities that offer family planning services. Hospitals (56 percent) are more likely to have family planning guidelines compared with other facility types. Similarly, STI guidelines are available at only 39 percent of facilities; they are mostly found in health centres (51 percent). Family planning visual aids for health education are available in 8 of 10 facilities.

Item	Type of Facility					Total percentage
	Hospital	Health Centre	Maternity	Clinic	Dispensary	
Items to support quality counselling						
Visual and auditory privacy	94	96	98	98	90	93
Visual privacy only	2	2	2	1	4	3
Auditory privacy only	1	0	0	0	0	0
No privacy	3	2	0	1	6	4
Individual client health cards	66	64	69	69	62	64
Written FP guidelines	56	46	33	28	32	34
Written STI guidelines	44	51	33	30	42	39
Visual aids for health education on family planning	90	86	84	72	83	81
Visual aids for health education on sexually transmitted infections (STIs) including HIV/AIDS	72	59	66	50	57	57
All items to support quality counselling ¹	40	31	23	19	24	25
All items to support quality counselling for FP and for STI services and client education ²	20	18	13	11	15	15
Number of facilities offering TFP	46	68	15	164	319	613

¹ This includes the availability of all of the following: a private room or visual barrier, individual client health cards, written FP guidelines, and any visual aids for FP.

² All items to support quality counselling, written STI guidelines, and visual aids for health education on STIs (including HIV)

Note: Total includes 1 VCT facility.

3.5 Maternal and Newborn Health Care

Antenatal Care

Basic maternal and newborn care services are available throughout the country. Excluding clinics and stand-alone VCT facilities, antenatal care is offered in 88 percent of all facilities, postnatal care in 73 percent, and tetanus toxoid (TT) vaccination in 86 percent of all facilities nationwide. Overall, 72 percent of the health facilities offer all three services (ANC, PNC, and TT vaccine). Facilities in Nyanza province (88 percent) are most likely to offer these services, and facilities in Rift Valley province are least likely (57 percent).

Between 83 and 89 percent of hospitals, health centres, and maternity facilities report that they routinely test ANC clients for syphilis as part of ANC services. ANC clients visiting dispensaries are least likely to receive this service as only 38 percent of dispensaries offering ANC services routinely test for syphilis. A little less than half of government-managed and a third of NGO-managed facilities routinely test

ANC clients for syphilis compared with three quarters of FBO-managed facilities. Altogether 45 percent of facilities offer ANC, PNC, and TT vaccine, and also routinely test ANC clients for syphilis.

Table 3.8 Availability of antenatal and postnatal care as well as other family health services

Percentage of facilities offering antenatal care (ANC), postnatal care (PNC), and tetanus toxoid vaccine (TT) and percentage offering all three services, by type of facility, managing authority, and province (excluding VCTs and clinics), Kenya SPA 2010

Background characteristic	ANC	PNC	TT vaccine	ANC, PNC and TT	Routinely test all ANC clients for syphilis	ANC, PNC, TT, and test for syphilis	Number of facilities
Type of Facility							
Hospital	94	92	94	91	89	86	51
Health Centre	99	83	99	83	84	69	80
Maternity	93	82	90	80	83	72	17
Dispensary	84	68	81	66	38	31	340
Managing Authority							
Government	89	75	88	75	47	41	337
NGO	91	64	91	64	31	11	15
Private (for profit)	81	65	75	60	56	48	56
Faith-based organisation	87	72	83	68	77	66	79
Province							
Nairobi	81	72	81	72	65	56	29
Central	89	83	88	82	67	62	58
Coast	83	71	80	67	66	53	39
Eastern	88	81	84	77	58	56	84
North Eastern	97	79	88	78	28	25	17
Nyanza	96	89	96	88	56	49	74
Rift Valley	81	57	81	57	35	26	148
Western	99	76	93	73	62	50	37
Total	88	73	86	72	52	45	487

Malaria-related Health Education

Malaria infection during pregnancy can have adverse effects on both mother and foetus, including maternal anaemia, foetal loss, intrauterine growth retardation, and premature delivery. The Kenyan Reproductive Health policy calls for intermittent prophylactic treatment (IPT) of malaria during pregnancy using SP at all ANC service sites in the country. Table 3.9 provides information on IPT and the content of malaria-related health education offered to ANC clients.

Table 3.9 Observed content of malaria-related health education for first-visit and follow-up ANC clients

Percentage of first and follow up visit ANC clients who were observed to be educated on intermittent prophylactic treatment (IPT) and received the first dose of IPT in facility, by type of facility, Kenya SPA 2010

Counselling topic	Type of Facility					Total percentage
	Hospital	Health Centre	Maternity	Clinic	Dispensary	
First visit ANC clients for whom provider:						
Gave or prescribed medicine for IPT	80	77	58	88	72	77
Explained purpose of IPT	64	62	46	57	59	61
Explained how to take medicine for IPT	69	58	54	73	61	64
Explained possible side-effects of medicine	21	21	13	10	14	18
Gave 1st dose of IPT in his/her presence for client to swallow	53	58	27	43	49	52
Explained importance of 2nd dose of IPT	34	36	23	45	38	36
Number of first visit ANC clients	208	146	8	23	170	556
Follow-up visit ANC client						
Gave or prescribed medicine for IPT	55	63	23	19	71	60
Explained purpose of IPT	37	35	18	13	49	38
Explained how to take medicine for IPT	45	48	18	6	59	48
Explained possible side-effects of medicine	12	13	0	0	9	10
Number of follow-up visit ANC clients	303	234	10	45	262	853

On average, three-quarters of all observed first-visit ANC clients were either given or prescribed medicine for IPT along with 60 percent of follow-up ANC clients. A larger proportion of first-visit ANC clients in hospitals (80 percent), health centres (77 percent), clinics (88 percent), and dispensaries (72 percent) received or were prescribed medicines for IPT than were clients receiving their services from maternity facilities (58 percent). Providers explained the purpose of the IPT and how to take medicine for IPT during 6 out of 10 observed first-visit ANC consultations. One important aspect of the IPT policy is that clients take the IPT prior to leaving the facility, in the presence of a provider. Overall, only half of first-visit clients were observed taking their IPT dose in the health facility, in the presence of a provider. Generally, in both first and follow-up visits, providers explained the possible side-effects of the medicine to less than 20 percent of the clients.

Normal Delivery Services

Complications of labour and delivery are unpredictable. It is therefore important for facilities offering delivery services to have certain equipment and supplies for managing complications readily available. Table 3.10 provides information on the availability of delivery services (excluding clinics and VCT stand-alone facilities) and supporting equipment and supplies to manage complications of labour and delivery.

Delivery services are available in 41 percent of the health facilities (Table 3.10). These services are more likely to be available in hospitals (95 percent), maternity facilities (85 percent), and health centres (83 percent). Private facilities (57 percent) are more likely to provide delivery services than government, NGO, or faith-based ones. At the provincial level, North Eastern (62 percent), Nyanza (56 percent), and Western (54 percent) are the only provinces where over half of the health facilities provide delivery services. Central province has the smallest proportion of facilities (28 percent) that provide these services.

Table 3.10 Normal delivery services, and equipment and supplies for complications of labour and delivery

Percentage of facilities that offer normal delivery services and among those, percentage where indicated equipment is available, by background characteristics (excluding VCTs and clinics), Kenya SPA 2010

Background characteristic	Percentage of facilities offering delivery services	Total number of facilities	Vacuum extractor for assisted deliveries	Remove retained products		Blood transfusion services	Caesarean section	Emergency support for newborn		Number of facilities offering delivery services
				Vacuum aspirator	D&C kit			Newborn respiratory support ¹	External heat source ²	
Type of Facility										
Hospital	95	51	20	64	45	60	55	92	67	48
Health Centre	83	80	2	37	8	6	1	81	13	66
Maternity	85	17	10	50	32	50	36	69	57	14
Dispensary	21	340	0	11	0	2	0	52	14	70
Managing Authority										
Government	37	337	3	33	8	11	9	73	19	124
NGO	35	15	2	9	10	17	17	100	10	5
Private (for profit)	57	56	16	51	40	51	41	70	53	32
FBO	48	79	7	35	22	27	20	70	47	38
Province										
Nairobi	45	29	13	47	34	48	42	76	56	13
Central	28	58	6	40	25	31	31	77	78	16
Coast	40	39	8	44	21	26	21	59	27	16
Eastern	42	84	3	22	12	13	11	81	20	35
North Eastern	62	17	5	18	5	29	8	42	6	11
Nyanza	56	74	8	30	17	20	10	54	19	41
Rift Valley	32	148	6	43	11	15	14	92	33	47
Western	54	37	1	45	15	14	13	72	19	20
Total	41	487	6	35	16	21	16	73	30	199

¹ Infant-sized ambu bag

² Most often an incubator, although heat light would be sufficient.

Caesarean Section and Blood Transfusion Services

Caesarean section and blood transfusion services are the two additional services required for comprehensive emergency obstetric care. Caesarean section (CS) services are available in only 16 percent of health facilities that report that they provide delivery services. These services are mainly available in hospitals (55 percent) and maternity facilities (36 percent). Nairobi province (42 percent) has the highest proportion of facilities that provide CS services. Less than one-third of the facilities in other provinces provide CS services.

One of five health facilities that provide delivery services also provides blood transfusion services; they are available in about three of five hospitals and half of the maternity facilities. Private facilities (51 percent) are more likely to provide blood transfusion services than FBO-managed (27 percent), NGO-managed (17 percent), and government (11 percent) facilities. Close to half of the health facilities in Nairobi province that offer delivery services also provide blood transfusion services. In the remaining provinces, less than one-third of these facilities is able to provide blood transfusion services.

Equipment and Supplies for Managing Complications of Labour and Delivery

Only a small proportion of facilities (mostly hospitals) have equipment and supplies to manage complications of labour and delivery. Vacuum extractors for assisted labour are available in only 6 percent of the health facilities overall, while vacuum aspirators and D&C kits for the removal of retained products of conception are available in 35 percent and 16 percent of health facilities, respectively.

Emergency Support for Newborns

Two items considered important for emergency support of the newborn are newborn respiratory support (infant sized ambu bag) and an external heat source (an incubator or heated light source). Newborn respiratory support is available in 73 percent of facilities offering delivery services, but an external heat source is found in less than a third of the facilities. The two items are each widely available in hospitals (92 percent and 67 percent respectively).

Signal Functions for Emergency Obstetric Care

As part of the Averting Maternal Death and Disability (AMDD) project, and in an effort to find intermediate indicators to track progress in the area of facility preparedness for maternal complications, 'signal functions' have been identified. Performance of these functions indicates the capacity of facilities to offer specialised services for emergency obstetric care. Table 3.11 presents the percentage of facilities that offer delivery services that also report providing these signal functions in the three months preceding the survey.

Table 3.11 Signal functions for emergency obstetric care

Among facilities offering delivery services, percentage that report performing the signal functions for emergency obstetric care (EmOC) at least once during the 3 months preceding the survey, by background characteristics, Kenya SPA 2010

Background characteristic	Percentage of facilities that applied or carried out parenteral:			Percentage of facilities that applied or carried out:								Number of facilities offering delivery services
	Antibiotics	Oxytocics	Anticonvulsants/sedatives	Manual removal of placenta	Removal of retained products	Assisted vaginal delivery (AVD)	Blood transfusion	Caesarean section	Basic EmOC ¹	Comprehensive EmOC ²	Neonatal resuscitation	
Type of Facility												
Hospital	84	93	51	60	70	13	42	40	9	7	72	48
Health Centre	51	81	14	38	33	0	4	1	0	0	44	66
Maternity	67	85	24	33	62	2	23	25	0	0	57	14
Dispensary	35	73	6	13	9	0	0	0	0	0	19	70
Managing Authority												
Government	53	80	13	34	30	2	9	7	2	1	40	124
NGO	80	73	73	7	17	2	17	14	2	2	14	5
Private (for profit)	71	88	37	43	57	9	20	24	5	3	49	32
FBO	44	81	24	29	41	3	21	17	2	1	53	38
Province												
Nairobi	90	100	41	54	50	12	28	39	7	6	65	13
Central	65	87	29	39	32	6	22	21	4	2	52	16
Coast	37	67	28	32	37	5	17	15	2	2	31	16
Eastern	32	80	17	18	21	1	8	8	1	0	22	35
North Eastern	47	60	18	15	15	2	16	7	2	2	23	11
Nyanza	71	81	21	52	36	3	12	7	2	1	51	41
Rift Valley	59	90	17	31	50	3	10	9	3	3	52	47
Western	36	71	9	28	32	0	11	10	0	0	40	20
Total	55	81	21	34	36	3	13	12	2	2	43	199

¹ Facility applied the first six procedures (left-to-right) in the three months preceding the survey.

² Facility applied all basic EmOC procedures, plus blood transfusion and Caesarean section, in the three months preceding the survey.

Between 3 and 81 percent of facilities that offer delivery services performed the individual signal functions during the three months preceding the survey. Assisted vaginal delivery is the least common signal function performed (3 percent of facilities on average), probably because the procedure is not recommended by national policy. During the three months preceding the survey, only 13 percent of hospitals reported that they had conducted assisted vaginal deliveries, and about 70 percent reported that they had conducted removal of retained products using either a vacuum aspirator or D&C. Oxytocics was the most frequently performed procedure/intervention during the three months preceding the survey and was reported by 81 percent of the facilities that offer delivery services, including 93 percent of hospitals, 81 percent of health centres, and 85 percent of maternities.

Overall, only 2 percent of facilities, all hospitals, reported ever providing all the basic or comprehensive emergency obstetric care services in the three months preceding the survey. Less than 10 percent of hospitals reported offering either of these emergency obstetric care services.

Essential Preventive Labour and Delivery Care Practices

Table 3.12 summarises the labour and delivery care practices observed during the 2010 KSPA. Survey findings show that all three elements of pre-eclampsia/eclampsia (PE/E) screening were conducted in only 12 percent of observed deliveries. An initial blood pressure check, one element of PE/E screening, was done for 81 percent of observed deliveries. Maternity facilities (31 percent) are more likely to screen for all three elements of PE/E than hospitals (12 percent), health centres (0 percent), and dispensaries (0 percent). Facilities in Nairobi (49 percent) are more likely than those in Central (20 percent) and Nyanza (25 percent) provinces to screen for PE/E. In four provinces, specifically Coast, Eastern, Rift Valley, and Western, none of the observed deliveries included the full screening.

In four of every five deliveries observed, the attending provider used a partograph to monitor labour and delivery. All observed deliveries at dispensaries, and 82 percent of those at hospitals included use of a

partograph. The proportion of observed deliveries that included use of a partograph exceeded half in each province; however, the percentages varied from 96 percent in Central province to 64 percent in North Eastern province.

In about two-thirds of observed normal deliveries, all the elements of the active management of the third stage of labour (AMTSL) were done. AMTSL was least likely to be conducted for deliveries at NGO-managed health facilities (33 percent) compared with government, private, and faith-based organisations (67 percent, 75 percent, and 56 percent). At the provincial level, the use of AMTSL was observed in at least three quarters of the deliveries conducted in Central, Eastern, Rift Valley, and Western provinces. AMTSL was a component of less than half of the deliveries in Coast and Nyanza provinces.

Table 3.12 Essential preventive labour and delivery care practices

Percentage of observed deliveries for which the indicated procedures were conducted according to WHO standard (Managing Complications in Pregnancy and Childbirth), Kenya SPA 2010

Background characteristic	PE/E screening				Number of deliveries with responses to all elements	Partograph use	Number of deliveries with response to partograph use	Active management of third stage of labour (AMTSL)				Number of deliveries with responses to all elements except Uterotonic 1-4
	Initial blood pressure check	Urine for protein	Document blood pressure check	All elements of PE/E screening				Uterotonic given at delivery of anterior shoulder or within 1 minute of delivery	Cord traction	Uterine massage	All elements of AMTSL	
Type of Facility												
Hospital	83	17	54	12	281	82	462	77	90	87	67	461
Health Centre	58	0	44	0	19	68	52	71	83	97	59	60
Maternity	100	31	71	31	11	60	24	35	72	94	28	26
Dispensary	0	0	0	0	7	100	7	-	-	-	-	0
Managing Authority												
Government	79	13	50	7	244	77	418	77	91	88	67	419
NGO	90	14	62	14	16	83	19	56	67	89	33	21
Private (for profit)	86	47	75	47	19	76	33	85	88	94	75	35
Faith-based organisation	85	25	59	22	39	95	75	65	81	88	56	72
Province												
Nairobi	84	53	66	49	22	81	50	79	86	98	73	52
Central	96	20	83	20	51	96	69	89	94	92	79	62
Coast	73	0	17	0	18	74	38	83	65	75	46	39
Eastern	75	2	48	0	49	86	93	87	92	89	75	90
North Eastern	88	3	46	3	26	64	37	90	86	63	50	37
Nyanza	65	25	70	25	64	71	115	39	80	85	39	115
Rift Valley	86	22	17	0	54	76	95	80	100	95	76	96
Western	82	0	58	0	35	86	49	85	94	96	79	56
Total	81	16	53	12	318	80	545	75	88	88	64	547

Essential Newborn Care Practices

Table 3.13 shows essential newborn care practices performed by health workers soon after delivery. These include cleaning and drying of the newborn, cutting of the umbilical cord, and initiation of breastfeeding. All three elements of essential newborn care were done for 46 percent of the newborns in observed deliveries. Health centres (58 percent) were more likely to adhere to the three practices than hospitals (46 percent) and maternity facilities (29 percent). The three elements of essential newborn care were observed in over half of the deliveries conducted in privately managed health facilities and in less than half of the deliveries in the facilities managed by other authorities. About two-thirds of the newborns in Nairobi, Central, and Rift Valley provinces had the three elements of essential newborn care administered soon after birth.

Background characteristic	Essential newborn care				Number of deliveries with living newborn
	Cleans and dries newborn	Cuts cord	Initiates breastfeeding	All elements of essential newborn care	
Type of Facility					
Hospital	59	93	76	46	455
Health Centre	69	97	76	58	60
Maternity	56	87	71	29	26
Dispensary	0	100	100	0	7
Managing Authority					
Government	57	95	77	46	419
NGO	50	88	81	46	20
Private (for profit)	86	94	72	57	35
Faith-based organisation	62	88	70	41	75
Province					
Nairobi	97	98	73	69	52
Central	75	85	86	68	66
Coast	42	92	55	28	40
Eastern	48	93	64	24	92
North Eastern	56	100	56	32	34
Nyanza	43	96	92	43	122
Rift Valley	83	91	83	65	92
Western	34	94	63	26	51
Total	60	93	76	46	548

3.6 Sexually Transmitted Infections

Sexually transmitted infections (STIs) are a major public health problem, causing infertility and increasing the risk of transmission of HIV. Table 3.14 provides information on the availability of STI services, the primary location of the services, and integration with other services.

Apart from stand-alone VCT facilities, STI services (defined as the availability of diagnosis, treatment, or both) are almost universally available (93 percent) and offered five or more days a week in Kenyan health facilities. NGO facilities (84 percent) and private facilities (87 percent) are less likely to offer services than FBOs (99 percent) and government (96 percent). At the provincial level, facilities in Nairobi (84 percent) province are slightly less likely to offer STI services compared with facilities in the other provinces.

Ninety-seven percent of facilities offering STI services report providing the services from the general outpatient department (OPD); only 3 percent report that they provide these services from a 'special' STI clinic. Seventy-seven percent of facilities offering STI services have them available in the family planning area, and 66 percent have STI services available in ANC sites. Slightly more than half of STI facilities have these services at all three (OPD, FP, and ANC) service sites. This was mainly the case in government (66 percent) and NGO-managed (68 percent) facilities.

Table 3.14 Availability of services for sexually transmitted infections

Percentage of facilities offering services for sexually transmitted infections (STIs), among facilities offering services for STIs percentage where STI services are provided in the indicated service area and percentage where STI services are offered five or more days per week, by background characteristics, Kenya SPA 2010

Background characteristic	Any STI services	Number of facilities	Primary location ¹				OPD, FP, and ANC service areas	Percentage of facilities where services for STIs are available at least 5 days per week	Number of facilities offering STI services
			General outpatient	Special clinic ²	FP	ANC			
Type of Facility									
Hospital	98	51	94	4	43	47	32	97	49
Health Centre	100	80	99	1	54	80	50	92	80
Maternity	94	17	100	0	63	77	61	94	16
Clinic	85	203	94	6	75	42	38	93	172
Dispensary	97	340	98	2	89	77	71	96	329
Stand-alone VCT	14	5	34	50	63	16	16	81	1
Managing Authority									
Government	96	345	98	2	83	74	66	97	333
NGO	84	24	98	1	69	85	68	99	20
Private (for profit)	87	237	95	5	74	46	42	92	206
Faith-based organisation	99	89	96	2	61	77	52	92	88
Province									
Nairobi	84	45	100	0	42	75	36	97	38
Central	92	125	85	14	81	54	44	99	115
Coast	90	81	98	0	75	68	62	92	73
Eastern	98	118	100	0	79	63	57	96	115
Northeastern	94	24	99	0	64	72	64	89	23
Nyanza	96	83	99	1	76	69	62	98	79
Rift Valley	91	175	99	0	83	66	57	91	160
Western	98	44	99	1	79	85	76	92	43
Total	93	695	97	3	77	66	56	95	647

¹ Services may be available at multiple sites in the same facility if they are integrated. In small facilities, one service site and one provider may provide services for general outpatients, ANC, and family planning clients.

² This may be a specific STI clinic, a gynaecologic clinic for female clients, or the urology clinic for male clients.

3.7 Tuberculosis

Despite advances in treatment and therapies, tuberculosis (TB) remains one of the most common infectious diseases in the world. It is also one of the most common opportunistic infections associated with HIV and AIDS and one of the leading causes of death in people infected with HIV. Information collected on TB-related services is provided in Table 3.15.

Diagnosis

A facility is classified as offering TB diagnostic services if it either conducts the test (either by sputum smear or x-ray or both, or by clinical symptoms) on site or in an affiliated facility, or if the test is conducted elsewhere but test results are sent back to the facility for client follow-up. On average, just 3 in 10 facilities offer TB diagnostic services in Kenya. A large proportion of hospitals (91 percent) and health centres (74 percent) offer diagnostic services; 20 percent of dispensaries also have TB diagnosis services. Among managing authorities, FBO facilities (45 percent) are relatively more likely than government and NGO facilities (38 and 32 percent, respectively) to provide TB diagnostic services. At the provincial level, facilities in Eastern (23 percent) and North Eastern (20 percent) provinces are less likely than facilities in other regions to offer TB diagnostic services.

Treatment or Follow-up

TB treatment or follow-up is available in 37 percent of all facilities, including 90 percent of hospitals, 81 percent of health centres, and 35 percent of dispensaries. Government facilities are more likely to offer treatment or follow-up (53 percent) than other managing authorities. In addition, government facilities are more likely to offer treatment or follow-up services than diagnostic services (38 percent).

Direct Observed Therapy-Short course (DOTS)

The 2010 KSPA collected information on which facilities offer direct observation of therapy as a treatment option. As shown in Table 3.15, close to 9 of every 10 facilities that offer TB treatment or follow-up implement directly observed therapy-short course (DOTS). There is not much variation by type of facility and managing authority; however, at the provincial level, facilities in Rift Valley province are less likely to implement DOTS compared with facilities in the other provinces.

Table 3.15 Availability of services for tuberculosis

Among all facilities, percentage providing any TB diagnosis services and any TB treatment and/or follow-up services, and among those providing any treatment and/or follow-up services, percentage following DOTS or other strategies, by background characteristics, Kenya SPA 2010

Background characteristic	Percentage with:			Number of facilities ¹	Among facilities providing any TB treatment or follow-up services, percentage following:		Number of facilities offering any TB treatment or follow-up services
	Any TB diagnostic services	Any TB treatment or follow-up services	Any TB diagnostic or TB treatment/follow-up services		DOTS strategy	Treatment other than DOTS strategy	
Type of Facility							
Hospital	91	90	93	51	92	8	46
Health Centre	74	81	85	80	83	17	64
Maternity	39	21	41	17	100	0	4
Clinic	15	11	19	203	100	0	23
Dispensary	20	35	38	340	87	13	118
Managing Authority							
Government	38	53	55	345	86	14	182
NGO	32	44	46	24	100	0	11
Private (for profit)	14	9	17	237	92	8	22
FBO	45	45	56	89	94	6	40
Province							
Nairobi	40	42	45	45	79	21	19
Central	29	24	37	125	100	0	30
Coast	29	45	45	81	97	3	37
Eastern	23	42	44	118	98	2	50
North Eastern	20	22	22	24	100	0	5
Nyanza	48	58	59	83	89	11	48
Rift Valley	25	23	29	175	52	48	40
Western	39	61	66	44	100	0	27
Total	30	37	42	695	88	12	254

¹ Total includes 5 VCT facilities.

3.8 HIV/AIDS

Given the high prevalence of HIV/AIDS in Sub Saharan Africa, several initiatives have been implemented to ensure appropriate prevention of new HIV infections in populations and the treatment of people already living with HIV and AIDS. The 2010 KSPA collected information on various aspects of facilities' preparedness to provide quality HIV and AIDS services to the people of Kenya. Among the aspects assessed were:

- Testing systems
- Care and support services (CSS)
- Anti-retroviral therapy (ART)
- Treatment of malaria
- Treatment of opportunistic infections (OIs)
- Preventive treatment of pneumonia
- Prevention of mother-to-child transmission (PMTCT)

Some of the findings are presented in Table 3.16.

Table 3.16 Availability of HIV/AIDS and related care and support services

Percentage of facilities that offer the indicated HIV/AIDS-related services by background characteristics, Kenya SPA 2010

Background characteristic	Percentage of facilities offering or with the following:								Number of facilities
	Reported HIV testing system ¹	Care and support services for HIV/AIDS clients ²	Anti-retroviral treatment services ³	Minimum package of PMTCT (includes observed HIV testing system)	Treatment of malaria	Preventive treatment for TB ⁴	Primary preventive treatment ⁵	Any treatment of opportunistic infections ⁶	
Type of Facility									
Hospital	98	96	80	62	100	32	92	95	51
Health Centre	95	86	52	54	100	23	91	86	80
Maternity	89	73	11	24	98	4	70	71	17
Clinic	55	49	6	6	97	5	32	49	203
Dispensary	75	63	5	12	99	7	52	58	340
Stand-alone VCT	100	26	14	0	15	2	20	17	5
Managing Authority									
Government	78	70	23	25	99	11	65	66	345
NGO	95	75	42	20	90	1	65	74	24
Private (for profit)	58	49	3	6	98	4	33	48	237
FBO	91	74	20	31	99	20	62	73	89
Province									
Nairobi	80	63	33	8	87	14	57	63	45
Central	66	39	10	14	100	2	43	39	125
Coast	82	74	24	18	96	4	50	65	81
Eastern	87	76	12	17	100	26	53	67	118
North Eastern	41	62	9	3	97	3	28	62	24
Nyanza	85	95	31	34	100	10	79	95	83
Rift Valley	61	53	11	18	99	6	53	53	175
Western	87	69	17	32	98	12	58	66	44
Total	74	64	16	19	98	10	54	61	695

¹ Facility reports conducting the test in the facility or in an affiliated external laboratory, or has an agreement with a testing site where the test results are expected to be returned to the facility.

² Providers assigned to this facility provide treatment for any opportunistic infections or symptoms related to HIV/AIDS (such as treatment for topical fungal infections, cryptococcal meningitis, or Kaposi sarcoma), or provide (or prescribe) palliative care for patients (such as symptom or pain management or nursing care for the terminally ill), or provide nutritional rehabilitation services, including the prescription or provision of fortified protein supplements, or provide care for paediatric HIV/AIDS patients.

³ Providers assigned to the facility either prescribe ART and/or provide medical follow-up services for ART clients.

⁴ Treatment of TB using Isoniazid routinely or selectively to HIV/AIDS clients depending on their condition.

⁵ Provision of cotrimoxazole as a preventative measure against common opportunistic infections, routinely or selectively to HIV/AIDS clients depending on their condition.

⁶ Includes treatment of opportunistic infections; may include treatment of TB.

Testing Systems

A facility has an HIV testing system if it either conducts the HIV test on site or in an affiliated laboratory, or if the test is conducted elsewhere but test results are sent back to the facility for client follow-up.

Overall, three-quarters of health facilities have a testing system, including 95-100 percent of stand-alone VCT facilities, hospitals, and health centres; three quarters of dispensaries also have HIV testing systems. About 4 in every 5 government facilities and nearly 6 of every 10 private (for-profit) facilities have a testing system. Facilities in the North Eastern province (41 percent) are markedly less likely to have a testing system compared with facilities in other provinces.

Care and Support Services

Care and support services are defined as the provision of curative and palliative care services for illnesses that may be related to HIV and AIDS. These include treatment of opportunistic infections including TB, STIs, and malaria; the provision of, or referrals for, counselling for social support services for those living with HIV and AIDS.

On average, about 6 of every 10 health facilities in Kenya provide HIV/AIDS care and support services. Hospitals and health centres are more likely to offer care and support services than other facility types. At the provincial level, facilities in Central province (39 percent) are the least likely to offer care and support services for HIV/AIDS clients, and facilities in Nyanza province (95 percent) are the most likely to provide these services.

Anti-Retroviral Therapy (ART)

Anti-retroviral therapy was introduced in Kenya in the 1990s. At the time of the survey, only 16 percent of all facilities were either prescribing ART or providing ART follow-up services. These facilities were mostly hospitals (80 percent) and health centres (52 percent). NGO facilities are more likely (42 percent) to offer ART than government (23 percent) and FBO (20 percent) facilities. Only 3 percent of the privately owned facilities provide ART services. Facilities in North Eastern province (9 percent) are less likely to provide ART services compared with facilities in Nairobi (33 percent) and Nyanza (31 percent) provinces.

Treatment of Malaria, Isoniazid Preventive Therapy, and Cotrimoxazole Preventive Therapy

Although there is no conclusive link between HIV/AIDS and malaria, the burden of malaria is high in many areas where HIV and AIDS are a major public health problem. As evident in Table 3.16, treatment of malaria is almost universally available across all facility types (except stand-alone VCTs), all managing authorities, and all provinces.

Tuberculosis is a major cause of morbidity and mortality in people living with HIV and AIDS, even in those on ARV treatment. WHO therefore recommends preventive treatment of TB using Isoniazid to reduce the burden of TB in people living with HIV and AIDS. According to survey findings, Isoniazid preventive therapy is offered in only 10 percent of all facilities in Kenya. Hospitals (32 percent) and health centres (23 percent) are more likely to offer Isoniazid preventive therapy than other facility types.

Cotrimoxazole is highly effective in reducing morbidity and mortality among individuals with symptomatic HIV disease because it prevents opportunistic infections. Cotrimoxazole preventive treatment is available in 54 percent of facilities, predominantly in hospitals (92 percent) and health centres (91 percent), as well as facilities in Nyanza province (79 percent).

Prevention of Mother-to-Child Transmission of HIV (PMTCT)

The 2010 KSPA defines the minimum package of PMTCT services as having an HIV testing system, ARV prophylaxis to both mother and newborn, counselling about infant feeding, and counselling, referral, or both about family planning. According to Table 3.17, nearly 6 of 10 facilities in Kenya report that they offer PMTCT services; the minimum package of PMTCT services is available in about one-third of the facilities that report offering PMTCT services. The minimum PMTCT package is offered in 71 percent of hospitals and in 58 percent of health centres. Facilities in Nairobi (17 percent) and North Eastern (14 percent) provinces are less likely to have the minimum PMTCT package compared with facilities in Nyanza (42 percent) and Coast (40 percent) provinces.

All items for PMTCT-plus, which includes both the minimum PMTCT package and ARV therapy for HIV positive women, their children, and affected family members, were available in only 15 percent of facilities that report that they offer PMTCT services. Over half (56 percent) of the hospitals and 29 percent of health centres that report that they offer PMTCT services have all items for PMTCT-plus. Nyanza province (24 percent) has the highest proportion of facilities with all items for PMTCT plus, and Nairobi (5 percent) has the lowest.

Table 3.17 Availability of PMTCT and PMCTC+ services

Percentage of facilities offering PMTCT services, and among facilities offering PMTCT, percentage offering the indicated component of PMTCT, by facility type, managing authority, and province, Kenya SPA 2010

Background characteristic	Percentage of facilities reporting provision of PMCTC services	Total number of facilities	Percentage of facilities reporting they offer the indicated PMTCT services							Number of facilities offering PMTCT services
			Observed HIV testing system	ARV prophylaxis to prevent MTCT	Maternal nutrition and infant feeding counselling	Family planning counselling or referral	All four items for minimum package PMTCT	ARV therapy for HIV+ women and children	All items for PMTCT+ ¹	
Type of Facility										
Hospital	88	51	90	81	97	97	71	72	56	44
Health Centre	92	80	76	81	96	92	58	48	29	74
Maternity	70	17	72	49	100	100	35	8	3	12
Clinic	24	203	69	35	91	98	26	20	7	48
Dispensary	66	340	34	60	93	99	18	11	5	223
Stand-alone VCT	4	5	100	0	100	100	0	100	0	0
Managing Authority										
Government	73	345	44	70	94	99	34	30	20	254
NGO	65	24	38	81	96	100	30	31	29	16
Private (for profit)	27	237	60	38	92	100	22	6	3	63
FBO	77	89	83	55	94	86	40	27	8	69
Province										
Nairobi	48	45	59	55	87	85	17	57	5	22
Central	46	125	58	51	91	96	30	20	16	57
Coast	46	81	77	55	100	100	40	43	21	38
Eastern	56	118	46	70	94	100	31	17	8	66
North Eastern	24	24	19	74	72	100	14	10	6	6
Nyanza	83	83	55	75	99	97	42	36	24	69
Rift Valley	61	175	50	57	93	97	30	20	15	107
Western	87	44	45	74	94	100	36	14	12	38
Total	58	695	53	63	94	97	33	25	15	401

¹ All four items for minimum package plus ARV therapy

3.9 Older Persons and Persons with Disability

The health of older persons and persons living with disability has been an issue of increasing concern. These two segments of the population are in need of many things, including customised health services. Table 3.18 indicates the proportion of health facilities with health workers who provide services to older persons and those living with disability.

Table 3.18 Service for older persons and persons with disabilities
Percentage of facilities that have at least one provider who reports providing services to older persons/disabled and recent training in service to older persons, Kenya SPA 2010

Background characteristic	Percentage of facilities that have at least one provider			Number of facilities
	Who provides services for older persons or disabled	Trained in service for older persons in last year	Trained in service for older persons in last 3 years	
Type of facility				
Hospital	84	22	21	51
Health Centre	76	11	22	80
Maternity	51	19	12	17
Clinic	35	4	5	203
Dispensary	42	5	6	340
Stand-alone VCT	22	2	3	5
Managing authority				
Government	54	7	10	345
NGO	42	7	1	24
Private for-profit	35	6	6	237
Faith-based organisations	55	10	12	89
Province				
Nairobi	43	12	11	45
Central	45	9	5	125
Coast	39	6	2	81
Eastern	57	3	12	118
North Eastern	19	10	6	24
Nyanza	60	10	18	83
Rift Valley	40	5	9	175
Western	60	12	6	44
Total	47	7	9	695

Slightly less than one-half of facilities in Kenya have at least one health worker who provides services geared toward older persons or persons with disability. Nyanza and Western (each 60 percent) and Eastern provinces (57 percent) have the highest proportions of such facilities, and North Eastern province has the lowest (19 percent). The majority of hospitals (84 percent) and health centres (76 percent) have health workers who provide these services compared with only a third of clinics and 22 percent of stand-alone VCT facilities. Overall, less than 10 percent of the health facilities have at least one health worker who was trained to provide services to older persons and persons with disability, in the 2-3 years before the survey.

3.10 Youth

The youth face many challenges and risks that expose them to early pregnancies, sexually transmitted infections, and HIV and AIDS. The need to provide youth with health services, including information that will empower them to face challenges in their lives with minimal risk to their health, has been given prominence over the years. One of the initiatives in this regard is the provision of youth friendly services (YFS). Findings of the 2010 KSPA in connection with the provision of services to youth are summarised in Table 3.19.

Table 3.19 Youth-friendly services

Percentage of facilities that provide YFS HIV counselling and testing services and have at least one provider who reports providing YFS and recent training in YFS, Kenya SPA 2010

Background characteristic	Percentage of facilities that have:				Number of facilities
	Youth-friendly counselling and testing services	At least one provider who provides YFS	At least one provider trained in YFS in last year	At least one provider trained in YFS in last 2-3 years	
Type of facility					
Hospital	21	74	38	21	51
Health Centre	12	59	25	23	80
Maternity	6	34	20	11	17
Clinic	2	17	9	7	203
Dispensary	7	32	9	11	340
Stand-alone VCT	53	63	44	9	5
Managing authority					
Government	8	41	13	15	345
NGO	13	48	22	7	24
Private for-profit	3	18	8	9	237
Faith-based organisations	15	43	27	9	89
Province					
Nairobi	17	51	33	14	45
Central	2	21	8	9	125
Coast	7	27	8	11	81
Eastern	6	35	12	9	118
North Eastern	0	16	11	10	24
Nyanza	11	57	24	15	83
Rift Valley	5	26	10	16	175
Western	24	57	21	6	44
Total	7	34	14	12	695

Only a small proportion of facilities (7 percent) report that they offer youth-friendly HIV counselling services. About one-third of surveyed health facilities have at least one health worker who provides such services. Three of four hospitals and three of five health centres and stand-alone VCTs have health workers who provide youth friendly services. Slightly over half of the facilities in Nyanza, Western, and Nairobi have at least one health worker who provides youth friendly services, although only 16 percent of facilities in North Eastern province provide these services. Only 12 percent of the health facilities have a health worker who was trained in youth friendly services within the last two to three years before the survey.

APPENDIX: Weighting of Facilities in KSPA

The sampling frame is a listing of all facilities eligible to be included in the survey. This is the basis for determining the proportional representation of different types of facilities within the regions and the country. If the sampling frame is incomplete, this will influence how representative the sample findings are. For example, if the frame includes only government-managed facilities, the findings are representative only of government facilities. When only select non-governmental facilities are listed (e.g., faith-based) and the for-profit, non-governmental facilities are not included, the representativeness of the data will be affected.

In principle, the survey selects a sample of facilities proportionally to represent the type of facility and region. However, in some cases, the number of certain types of facilities is too small to provide enough information for meaningful analysis at the level data are presented. This is usually very significant when some of the services of interest, for example, services for HIV/AIDS, are more likely to be found in these particular facilities. Thus, the survey will usually over-sample this type of facility in order to have sufficient numbers (sample) for appropriate analysis.

Weighting mathematically corrects the proportion of facilities in the sample so that their information contributes proportional to their actual numbers in the country. This is of most importance when data from multiple types of facilities are combined to provide regional and national level results.

In the case of Kenya, 703 facilities were sampled for the survey. Hospitals, health centres, maternities and stand-alone VCT facilities for example were over-sampled since they exist in small numbers in the country and also provide most of the maternal health and HIV/AIDS services. The KSPA collected data from 252 hospitals, which corresponds to about 36 percent of the total sample. However, the real proportion of hospitals to all facilities as per the national list of facilities, i.e., the sampling frame for the Service Provision Assessment Survey, is only 7 percent. Thus, for analysis, the number of hospitals was adjusted down to 51, which approximately reflects the actual percentage (7 percent) of the sample.

In the report, the weighted numbers are provided in the tables, providing information on what proportion of the total comes from any particular type of facility, managing authority or region. It is important to note, however, that all facilities in the sample are used when calculating percentages. For example, when calculating the percentage of hospitals providing a particular service, information from all 252 hospitals visited are used and not information from only 51 hospitals. So, whenever a weighted number looks too small to be meaningful, it is important to review the unweighted number to know how many actual facilities/interviews contribute to the percentage in question.