

Salud Mesoamérica Initiative
Guatemala
Health Facility Data Quality Report
Second Follow-up Measurement

October 2018



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Foreword

This Data Quality Report on the Salud Mesoamérica Initiative (SMI) Guatemala Health Facility Surveys was produced in agreement with the Inter-American Development Bank (IDB). All analyses and writing were conducted by the Institute for Health Metrics and Evaluation (IHME) at the University of Washington.

About IHME

IHME monitors global health conditions and health systems and evaluates interventions, initiatives, and reforms. Our vision is that better health information will lead to better-informed decision-making and higher achievement in health. To that end, we strive to build objective evidence about what does and does not improve health conditions and health system performance. IHME provides high-quality and timely information on health, enabling policymakers, researchers, donors, practitioners, local decision-makers, and others to better allocate limited resources to achieve optimal results.

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Acknowledgments

This measurement was funded by the Bill & Melinda Gates Foundation, the Carlos Slim Foundation, and the Spanish Agency for International Development Cooperation, through the Inter-American Development Bank. We thank all the children and families who willingly participated in the study. We thank central and local governments for the support they extended to the study teams and their facilitation of access to communities and health facilities. We extend our gratitude to Grupo de investigación iDIES (Innovación, Diseño, Implementación y Evaluación en Salud), in partnership with Expertos en Talento Humano for their implementation of data collection in Guatemala for this project.

1 Chapter 1: Survey Methodology

1.1 Overview

Salud Mesoamérica Initiative (SMI) is a regional public-private partnership that brings together Mesoamerican governments, private foundations and bilateral and multilateral donors with the purpose of reducing health inequalities affecting the poorest 20 percent of the population in the region. Funding focuses on supply- and demand-side interventions, including evidence-based interventions, the expansion of proven and cost-effective healthcare packages, and the delivery of incentives for effective health services. One of its defining features is the application of a results-based (RBA) aid model that relies on performance measurement and enhanced transparency and accountability. The initiative focuses its resources on integrating key interventions aimed at reducing health inequalities that stem from the lack of access to quality reproductive, maternal, neonatal, and child health services (including immunization and nutrition services) for the poorest quintile of the population.

The objectives of the SMI evaluation are to assess whether countries are reaching the indicator targets set by the Initiative and to evaluate the results of specific interventions. In Guatemala, baseline data were collected at households and health facilities in intervention and comparison areas (2013). The first follow-up data collection (2014) and performance improvement plan measurement (2015) took place at health facilities in intervention areas only, however medical record review was not conducted at the performance improvement plan measurement round. This second follow-up measurement was performed at households and health facilities in intervention and comparison areas (2018). The following report details data collected from health facilities. This report focuses on health facility content and performance in intervention areas, with tables and figures for comparison areas only included in Appendix B and data collected for all facilities combined in Appendix D.

1.2 Health facility surveys

In general terms, the objectives of the health facility survey are to assess facility conditions, evaluate service provision and utilization, and measure quality of care. The medical record review (MRR) is implemented to collect retrospective data on facilities' treatment practices. Importantly, health facility data collection captures changes produced by interventions at the level of the health services access point, which may foretell changes in population health outcomes.

The objectives of the household survey are to capture reported maternal and child health data for women 15-49 years of age and for children 0-59 months of age. Community data collection permits the observation of health status, access to health care, and satisfaction with health care.

1.3 Contents and methods for data collection

1.3.1 Contents of the 2018 second follow-up measurement in health facilities

The second follow-up health facility survey includes three components: an interview questionnaire, an observation checklist, and MRRs. The questionnaire captures information reported by the facility director, manager, or person in charge of the health facility. Data are collected on general facility characteristics, infrastructure, and human resource composition, supply logistics, infection control, child health care, vaccine availability, family planning, and maternal, antenatal, delivery, and postpartum care. The checklist captures the direct observations of the surveyors at the time of the survey using an observation checklist, and in the case of some inputs, also reviewing administrative records to identify the presence of stock-outs in the three months prior to the survey. The MRR assesses the record keeping of the facilities and captures facilities' treatment practices in the case of various medical complications that women and infants experience, as well as the care provided before, during, and after uncomplicated deliveries.

1.4 Sampling

1.4.1 Health facility sampling

For this evaluation, a sample of intervention-area health facilities was selected from a list of all facilities serving the 20 municipalities covered by the SMI initiative, located in the departments of Huehuetenango and San Marcos. This list was constructed according to a referral network outlined by the Ministry of Health. Facilities are grouped according to three levels of Essential Obstetric and Neonatal Care (EONC) services provided: ambulatory, basic, and complete. Ambulatory facilities provide outpatient care, basic facilities are able to attend uncomplicated deliveries and provide immediate emergency obstetric and neonatal care, and complete facilities have surgical capacity in addition to the services above and have capacity to attend complicated deliveries.

All basic and complete facilities in the study area are included in order to ensure sufficient sample size for the medical record-derived indicators relating to delivery, and ambulatory-level facilities are selected to complete the sample. First, all ambulatory health facilities assigned to serve a community selected for the SMI-Guatemala household census are added to the sampling frame. If the size of this list exceeds the desired sample size, then the sample is randomly selected from this list of facilities. Facilities are selected at random if they were visited at baseline until a sample size of 21 in intervention areas is reached. If the sample still has not reached 21, facilities are selected at random from the list of places not visited at baseline until a sample size of 20 in intervention areas is reached. Two backup facilities per municipality are selected in case sampled facilities cannot be interviewed due to security or logistic concerns. Two ambulatory facilities in comparison areas were replaced due to closure and security concerns, respectively. These replacement facilities were selected from a designated list of back-up facilities within the respective municipalities. An additional intervention-area ambulatory facility was visited that was not included in the original sample. This totals 91 intervention-area facilities for the second follow-up evaluation round rather than the originally sampled 90 facilities.

1.4.2 Medical record review sampling

To complete the medical record portion of the survey, records are randomly selected according to the level of services provided at the facility and the number of facilities within the study sample in order to reach a set total sample size of records for each review module. Records of delivery, postpartum care, maternal complications and neonatal complications were evaluated at the basic and complete facility level. Child growth and development records and antenatal care records were evaluated at ambulatory and basic facilities.

Medical record review quotas are set per facility by dividing the total number of records to be reviewed in intervention and comparison areas by the number of data entry modules to be completed at each level of care, and then among all sampled facilities at each level. Quota calculations take into account the prevalence of each type of record as measured in the SMI baseline and first follow-up survey, as well as the statistical power necessary to detect projected differences from baseline to the second follow-up for performance indicators for SMI interventions. Medical records were collected for a two year time period prior to the start of data collection. For the purposes of this report, only records from 20 months prior are displayed at the second follow-up evaluation because the interventions were not completed until this time period. Cases of obstetric and neonatal complications were sampled using a systematic random sampling technique in-facility. At the second follow-up evaluation, additional records for complications during delivery were recollected for the baseline time-period to assure comparability with the current evaluation phase.

1.5 Survey implementation

1.5.1 Data collection instruments

All surveys are conducted using a computer-assisted personal interview (CAPI). The CAPI was programmed using DatStat Illume and installed onto computer netbooks. CAPI supports skip patterns, inter-question answer consistency, and data entry ranges. The aim of introducing CAPI to the field was to reduce survey time by prompting only relevant questions, maintain a logical answering pattern across different questions, decrease data entry errors, and permit rapid data verification remotely.

1.5.2 Training and supervision of data collectors

Training sessions and health facility pilot surveys were conducted in Guatemala from April 23, 2018 to April 29, 2018. Two doctors and two nurses were trained to conduct the health facility surveys. All Grupo de investigación iDIES (Innovación, Diseño, Implementación y Evaluación en Salud) contracted employees underwent training led by IHME. Teams were split into their respective groups and given in-depth training and practice for each relevant component of data collection. The training included content of each survey, proper conduct of the survey, in-depth review of the instrument, and hands-on training on the CAPI software. Health facility surveyors participated in a two-day pilot at health facilities of different EONC levels where they applied the questionnaire, conducted observation exercises, and practiced medical record sampling and review. Representatives from IHME, IDB, and the Guatemala

Ministry of Health provided oversight during pilot exercises. IHME and Grupo iDIES held debriefing and re-training sessions with surveyors post-pilot and provided continued training during the first week of data collection in sampled communities and health facilities. Grupo iDIES continued providing retraining throughout data collection to maintain homogeneity and quality standards of the data collection teams over time. A supervisory trip was conducted from July 16 - 20, 2018, during which time an IHME staff member observed active census, household, and health facility data collection and provided feedback to data collectors.

1.5.3 Data collection and management

As described above, data were collected using computer netbooks equipped with CAPI software. Field team leaders monitored the implementation of the survey and reported feedback. Data collection using CAPI allowed data to be transferred instantaneously once a survey was completed via a secure link to IHME. IHME monitored collected data on a continuous basis and provided feedback. Suggestions, surveyor feedback, and any modifications were incorporated into the instrument and readily transmitted to the field. In Guatemala, data collection was conducted between May and September 2018.

1.5.4 Data analysis and report writing

Data analysis was conducted at IHME. Analysis was performed using STATA version 14 and RStudio version 3. This report provides data summaries for intervention and comparison area facilities and medical records in Guatemala.

2 Chapter 2: Facility-level infrastructure, resources, management, and support

2.1 General description

2.1.1 Health facility classification

A total of 61 facilities in intervention areas were visited for the second follow-up evaluation, as displayed below. The ambulatory level is comprised of community centers, minimal health units, health centers, and health posts. The basic level is comprised of CAPs (Permanent Care Centers) and CAIMIS (Mother and Child Health Centers), as well as one hospital. The complete level is comprised of three hospitals.

Table 2.1: Health facility classification

EONC	Baseline	First Follow-Up	Second Follow-Up
Ambulatory	47	41	41
Basic	13	15	17
Complete	4	4	3
Total	64	60	61

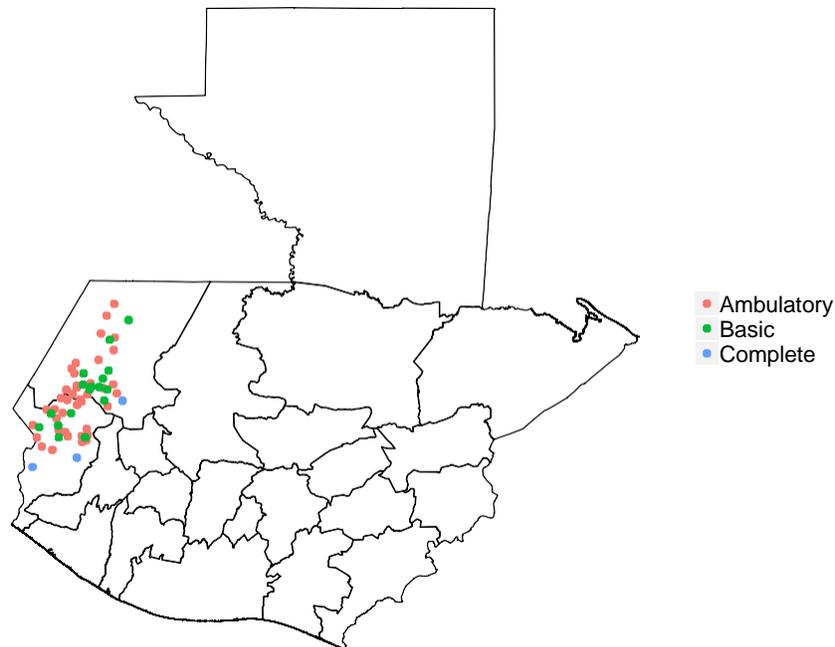
2.1.2 Geographical representation

Intervention-area facilities surveyed during the second follow-up evaluation were located in 20 municipalities in two departments.

Table 2.2: Number of intervention facilities by municipality

Municipality	Baseline Facilities	First Follow-up Facilities	Second Follow-up Facilities
Huehuetenango Department			
Colotenango	2	2	2
Huehuetenango	1	1	1
San Gaspar Ixchil	1	2	2
San Idelfonso Ixtahuacán	2	3	4
San Juan Atitan	3	2	1
San Mateo Ixtatán	5	4	3
San Miguel Acatán	6	2	4
San Pedro Necta	2	2	4
San Rafael Petzal	2	1	2
San Sebastian Huehuetenango	-	1	3
Santa Barbara	4	3	2
Santa Eulalia	1	-	-
Todos Santos Cuchumatan	3	2	2
San Marcos Department			
Comitancillo	5	5	6
Concepción Tutuapa	9	7	10
Ixchiguan	6	9	3
Malacatan	1	1	1
San José Ojetenam	3	5	3
San Marcos	1	1	1
Sibinal	2	4	3
Total	64	60	61

Figure 2.1: Geographical representation of intervention-area facilities



2.1.3 Governing authority

All health facilities evaluated were public institutions governed by the Guatemala Ministry of Health.

2.2 Medical record extraction

The medical record review component of the study included a review of 2,142 medical records at the second follow-up evaluation. The number and type of medical records reviewed varied depending on the type of facility and services provided. Records of antenatal care and growth and development cases were collected from ambulatory and basic facilities at the second follow-up evaluation. Records of uncomplicated deliveries, immediate postpartum care, and maternal and neonatal complications were collected from basic and complete facilities at the second follow-up evaluation.

The neonatal and maternal complications baseline record count shown in Table 2.3 displays the total number of medical records collected throughout this study. Maternal and neonatal complications were collected at the baseline data collection round (2011-2013) and were also re-collected for the 2011-2013 time frame during the second follow-up evaluation. Maternal and neonatal medical records from 2011-2013 were re-collected at the second follow-up evaluation to capture relevant data that reflect updated indicator definitions and standards of care that were not captured in the baseline surveys. The indicators and records evaluated in Chapter 7 of this report include only medical records that were

re-collected at the second follow-up evaluation for the periods of 2011-2013 (baseline) and 2016-2018 (second follow-up).

Table 2.3: Medical record extraction, intervention facilities

Record Type	Baseline			First Follow-up			Second Follow-Up		
	Ambulatory	Basic	Complete	Ambulatory	Basic	Complete	Ambulatory	Basic	Complete
Growth and development	181	47	12	420	150	10	360	160	0
Antenatal care	176	137	19	420	156	40	411	110	1
Postpartum care	0	128	34	0	193	94	0	184	71
Uncomplicated delivery	0	179	69	0	218	88	0	293	78
Maternal complications	0	49	104	0	168	110	0	116	91
Neonatal complications	0	49	203	0	133	114	0	134	133
Total	357	589	441	840	1018	456	771	997	374

2.3 Referrals

During the questionnaire component of the survey, complete facility representatives were asked about whether the facility receives patient referrals from other facilities and whether the facility sends patient referrals to other facilities. Referral practices specific to routine and complicated deliveries were also evaluated.

Table 2.4: Referrals, ambulatory intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Sends patient referrals to other facilities	47	100	(92.5 - 100)	41	100	(91.4 - 100)	41	100.0	(91.4 - 100)
Sends referred routine deliveries	-	-	-	-	-	-	41	70.7	(54.5 - 83.9)
Sends referred complicated deliveries	-	-	-	-	-	-	41	97.6	(87.1 - 99.9)

Table 2.5: Referrals, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Receives referred patients from other facilities	13	100	(75.3 - 100)	15	93.3	(68.1 - 99.8)	17	100.0	(80.5 - 100)
Receives referred routine deliveries	-	-	-	-	-	-	17	100.0	(80.5 - 100)
Receives referred complicated deliveries	-	-	-	-	-	-	17	94.1	(71.3 - 99.9)
Sends patient referrals to other facilities	13	100	(75.3 - 100)	15	100.0	(78.2 - 100)	17	100.0	(80.5 - 100)
Sends referred routine deliveries	-	-	-	-	-	-	17	0.0	(0 - 19.5)
Sends referred complicated deliveries	-	-	-	-	-	-	17	100.0	(80.5 - 100)

Table 2.6: Referrals, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Receives referred patients from other facilities	4	100	(39.8 - 100)	4	75	(19.4 - 99.4)	3	100.0	(29.2 - 100)
Receives referred routine deliveries	-	-	-	-	-	-	3	100.0	(29.2 - 100)
Receives referred complicated deliveries	-	-	-	-	-	-	3	100.0	(29.2 - 100)
Sends patient referrals to other facilities	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	66.7	(9.4 - 99.2)
Sends referred routine deliveries	-	-	-	-	-	-	2	0.0	(0 - 84.2)
Sends referred complicated deliveries	-	-	-	-	-	-	2	100.0	(15.8 - 100)

During the second follow-up evaluation, facilities also reported the types of documents that are requested when they receive referrals for delivery. This information was not captured at the baseline or first follow-up evaluation. Interviewers were instructed to group the directors' responses into five

answer categories: transfer/referral form, patient medical record, laboratory results, proof of insurance, or other. Interviewers were able to select more than one type of documentation if the facility requests more than one. Table 2.7 displays the documents that facilities request when they receive routine and complicated deliveries. Many facilities request proof of insurance and referral forms. The most common 'other' response was 'Personal Identification Document'.

Table 2.7: Requested referral documents, second follow-up evaluation

	Basic			Complete		
	N	%	CI	N	%	CI
Routine Deliveries						
Transfer form	17	0.0	(0 - 19.5)	3	0.0	(0 - 70.8)
Patient medical record	17	5.9	(0.1 - 28.7)	3	0.0	(0 - 70.8)
Lab tests	17	0.0	(0 - 19.5)	3	0.0	(0 - 70.8)
Proof of insurance	17	0.0	(0 - 19.5)	3	0.0	(0 - 70.8)
Referral sheet	17	76.5	(50.1 - 93.2)	3	100.0	(29.2 - 100)
Other documentation	17	52.9	(27.8 - 77)	3	66.7	(9.4 - 99.2)
Complicated Deliveries						
Transfer form	16	0.0	(0 - 20.6)	3	0.0	(0 - 70.8)
Patient medical record	16	0.0	(0 - 20.6)	3	0.0	(0 - 70.8)
Lab tests	16	6.2	(0.2 - 30.2)	3	0.0	(0 - 70.8)
Proof of insurance	16	0.0	(0 - 20.6)	3	0.0	(0 - 70.8)
Referral sheet	16	68.8	(41.3 - 89)	3	100.0	(29.2 - 100)
Other documentation	16	56.2	(29.9 - 80.2)	3	33.3	(0.8 - 90.6)

2.4 Personnel

2.4.1 Employed personnel

During the interview portion of the health facility surveys, representatives reported the types of staff employed at the facility. The following tables display the types of personnel employed from baseline to second follow-up by facility type. Each table displays the percent of facilities that employ at least one type of doctor or staff member listed. These tables do not reflect the total number or average number of staff employed at a given facility.

Table 2.8: Personnel employed, ambulatory intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
General physician	47	10.6	(3.5 - 23.1)	41	7.3	(1.5 - 19.9)	41	7.3	(1.5 - 19.9)
Nurse	47	31.9	(19.1 - 47.1)	41	36.6	(22.1 - 53.1)	41	53.7	(37.4 - 69.3)
Auxiliary nurse	47	95.7	(85.5 - 99.5)	41	100.0	(91.4 - 100)	41	97.6	(87.1 - 99.9)
Midwife	47	51.1	(36.1 - 65.9)	41	19.5	(8.8 - 34.9)	41	0.0	(0 - 8.6)
Social worker	47	4.3	(0.5 - 14.5)	41	4.9	(0.6 - 16.5)	41	2.4	(0.1 - 12.9)
Health promoter	47	34.0	(20.9 - 49.3)	41	9.8	(2.7 - 23.1)	41	9.8	(2.7 - 23.1)
Equipment maintenance worker	47	4.3	(0.5 - 14.5)	41	2.4	(0.1 - 12.9)	40	0.0	(0 - 8.8)
Building maintenance worker	47	6.4	(1.3 - 17.5)	41	2.4	(0.1 - 12.9)	41	0.0	(0 - 8.6)

* One ambulatory facility at the second follow-up responded 'don't know/refuse to respond' when asked about equipment maintenance worker.

Table 2.9: Personnel employed, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
General physician	13	92.3	(64 - 99.8)	15	100.0	(78.2 - 100)	17	94.1	(71.3 - 99.9)
Nurse	13	100.0	(75.3 - 100)	15	100.0	(78.2 - 100)	17	100.0	(80.5 - 100)
Auxiliary nurse	13	100.0	(75.3 - 100)	15	100.0	(78.2 - 100)	17	100.0	(80.5 - 100)
Midwife	13	38.5	(13.9 - 68.4)	15	13.3	(1.7 - 40.5)	17	5.9	(0.1 - 28.7)
Social worker	13	53.8	(25.1 - 80.8)	15	53.3	(26.6 - 78.7)	17	41.2	(18.4 - 67.1)
Health promoter	13	53.8	(25.1 - 80.8)	15	13.3	(1.7 - 40.5)	16	6.2	(0.2 - 30.2)
Pediatrician	13	0.0	(0 - 24.7)	15	0.0	(0 - 21.8)	17	11.8	(1.5 - 36.4)
Nutritionist	13	69.2	(38.6 - 90.9)	15	60.0	(32.3 - 83.7)	17	5.9	(0.1 - 28.7)
Pharmacy dispenser	13	7.7	(0.2 - 36)	15	6.7	(0.2 - 31.9)	17	94.1	(71.3 - 99.9)
Lab technician	13	38.5	(13.9 - 68.4)	15	53.3	(26.6 - 78.7)	17	58.8	(32.9 - 81.6)
Internist	-	-	-	15	0.0	(0 - 21.8)	17	5.9	(0.1 - 28.7)
Gynecologist	-	-	-	15	6.7	(0.2 - 31.9)	17	11.8	(1.5 - 36.4)
Surgeon	-	-	-	15	0.0	(0 - 21.8)	17	5.9	(0.1 - 28.7)
Anesthesiologist	-	-	-	15	6.7	(0.2 - 31.9)	17	0.0	(0 - 19.5)
Emergency medical technician	-	-	-	15	6.7	(0.2 - 31.9)	17	11.8	(1.5 - 36.4)
Radiology technician	-	-	-	15	0.0	(0 - 21.8)	17	5.9	(0.1 - 28.7)
Ambulance driver	-	-	-	15	100.0	(78.2 - 100)	17	100.0	(80.5 - 100)
Equipment maintenance worker	13	7.7	(0.2 - 36)	15	20.0	(4.3 - 48.1)	17	11.8	(1.5 - 36.4)
Building maintenance worker	13	84.6	(54.6 - 98.1)	15	40.0	(16.3 - 67.7)	17	100.0	(80.5 - 100)

* One ambulatory facility at the second follow-up responded 'don't know/refuse to respond' when asked about health promoter.

Table 2.10: Personnel employed, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
General physician	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)
Nurse	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)
Auxiliary nurse	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)
Midwife	4	0	(0 - 60.2)	4	0	(0 - 60.2)	3	0.0	(0 - 70.8)
Social worker	4	75	(19.4 - 99.4)	4	50	(6.8 - 93.2)	3	100.0	(29.2 - 100)
Health promoter	4	0	(0 - 60.2)	4	25	(0.6 - 80.6)	3	0.0	(0 - 70.8)
Pediatrician	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)
Nutritionist	4	75	(19.4 - 99.4)	4	75	(19.4 - 99.4)	3	100.0	(29.2 - 100)
Pharmacy dispenser	4	75	(19.4 - 99.4)	4	75	(19.4 - 99.4)	3	100.0	(29.2 - 100)
Lab technician	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)
Internist	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)
Gynecologist	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)
Surgeon	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)
Anesthesiologist	4	100	(39.8 - 100)	4	50	(6.8 - 93.2)	3	100.0	(29.2 - 100)
Emergency medical technician	4	0	(0 - 60.2)	4	25	(0.6 - 80.6)	3	33.3	(0.8 - 90.6)
Radiology technician	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)
Ambulance driver	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)
Equipment maintenance worker	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)
Building maintenance worker	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)

2.5 Electricity and water

In the health facility questionnaire, facility managers were asked about sources of electricity and water to the facility. Facilities in the table below may report more than one source of electricity and water. The first line of the table displays the percent of facilities that report having functional electricity, followed by all sources used. Facilities were also asked their source of water, as shown in the second half of the table. At the first follow-up evaluation, those facilities that reported using an “other source” of electricity tended to name a local company or other non-municipal source of electricity. Most cases of “other water source” across all collection periods indicated that water was sourced from community neighbors and schools.

Table 2.11: Access to electricity and water, ambulatory intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Functional electricity	47	95.7	(85.5 - 99.5)	41	92.7	(80.1 - 98.5)	41	95.1	(83.5 - 99.4)
Electricity source:									
Public central supply	42	97.6	(87.4 - 99.9)	37	62.2	(44.8 - 77.5)	39	100.0	(91 - 100)
Private supply	42	2.4	(0.1 - 12.6)	37	21.6	(9.8 - 38.2)	39	0.0	(0 - 9)
In-facility generator	42	0.0	(0 - 8.4)	37	0.0	(0 - 9.5)	39	0.0	(0 - 9)
solar generator	42	0.0	(0 - 8.4)	37	2.7	(0.1 - 14.2)	39	2.6	(0.1 - 13.5)
Other	42	0.0	(0 - 8.4)	37	24.3	(11.8 - 41.2)	39	0.0	(0 - 9)
Water source:									
Piped into facility	45	62.2	(46.5 - 76.2)	41	92.7	(80.1 - 98.5)	40	90.0	(76.3 - 97.2)
Public well (protected)	45	8.9	(2.5 - 21.2)	41	2.4	(0.1 - 12.9)	40	2.5	(0.1 - 13.2)
Facility well (protected)	45	2.2	(0.1 - 11.8)	41	0.0	(0 - 8.6)	40	0.0	(0 - 8.8)
Unprotected well	45	4.4	(0.5 - 15.1)	41	0.0	(0 - 8.6)	40	0.0	(0 - 8.8)
Hand pump	45	0.0	(0 - 7.9)	41	0.0	(0 - 8.6)	40	0.0	(0 - 8.8)
Bottled water	45	0.0	(0 - 7.9)	41	0.0	(0 - 8.6)	40	0.0	(0 - 8.8)
Tanker	45	0.0	(0 - 7.9)	41	2.4	(0.1 - 12.9)	40	0.0	(0 - 8.8)
Rainwater	45	2.2	(0.1 - 11.8)	41	0.0	(0 - 8.6)	40	0.0	(0 - 8.8)
Other	45	35.6	(21.9 - 51.2)	41	14.6	(5.6 - 29.2)	40	7.5	(1.6 - 20.4)

* Three ambulatory facilities at the baseline responded 'don't know/decline to respond' when asked the source of electricity

† Two ambulatory facilities at the baseline responded 'don't know/decline to respond' when asked the source of water.

‡ One ambulatory facility at the first follow-up responded 'don't know/decline to respond' when asked the source of electricity.

Table 2.12: Access to electricity and water, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Functional electricity	13	100.0	(75.3 - 100)	15	93.3	(68.1 - 99.8)	17	94.1	(71.3 - 99.9)
Electricity source:									
Public central supply	13	100.0	(75.3 - 100)	14	57.1	(28.9 - 82.3)	16	100.0	(79.4 - 100)
Private supply	13	0.0	(0 - 24.7)	14	21.4	(4.7 - 50.8)	16	6.2	(0.2 - 30.2)
In-facility generator	13	0.0	(0 - 24.7)	14	0.0	(0 - 23.2)	16	0.0	(0 - 20.6)
solar generator	13	0.0	(0 - 24.7)	14	0.0	(0 - 23.2)	16	0.0	(0 - 20.6)
Other	13	7.7	(0.2 - 36)	14	42.9	(17.7 - 71.1)	16	0.0	(0 - 20.6)
Water source:									
Piped into facility	13	69.2	(38.6 - 90.9)	15	80.0	(51.9 - 95.7)	17	94.1	(71.3 - 99.9)
Public well (protected)	13	0.0	(0 - 24.7)	15	0.0	(0 - 21.8)	17	0.0	(0 - 19.5)
Facility well (protected)	13	0.0	(0 - 24.7)	15	6.7	(0.2 - 31.9)	17	5.9	(0.1 - 28.7)
Unprotected well	13	0.0	(0 - 24.7)	15	0.0	(0 - 21.8)	17	0.0	(0 - 19.5)
Hand pump	13	0.0	(0 - 24.7)	15	0.0	(0 - 21.8)	17	0.0	(0 - 19.5)
Bottled water	13	0.0	(0 - 24.7)	15	6.7	(0.2 - 31.9)	17	5.9	(0.1 - 28.7)
Tanker	13	7.7	(0.2 - 36)	15	6.7	(0.2 - 31.9)	17	5.9	(0.1 - 28.7)
Rainwater	13	0.0	(0 - 24.7)	15	0.0	(0 - 21.8)	17	0.0	(0 - 19.5)
Other	13	23.1	(5 - 53.8)	15	13.3	(1.7 - 40.5)	17	0.0	(0 - 19.5)

Table 2.13: Access to electricity and water, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Functional electricity	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)
Electricity source:									
Public central supply	4	100	(39.8 - 100)	4	75	(19.4 - 99.4)	3	100.0	(29.2 - 100)
Private supply	4	0	(0 - 60.2)	4	50	(6.8 - 93.2)	3	0.0	(0 - 70.8)
In-facility generator	4	0	(0 - 60.2)	4	0	(0 - 60.2)	3	0.0	(0 - 70.8)
solar generator	4	0	(0 - 60.2)	4	0	(0 - 60.2)	3	0.0	(0 - 70.8)
Other	4	25	(0.6 - 80.6)	4	25	(0.6 - 80.6)	3	0.0	(0 - 70.8)
Water source:									
Piped into facility	4	25	(0.6 - 80.6)	4	50	(6.8 - 93.2)	3	66.7	(9.4 - 99.2)
Public well (protected)	4	0	(0 - 60.2)	4	0	(0 - 60.2)	3	33.3	(0.8 - 90.6)
Facility well (protected)	4	75	(19.4 - 99.4)	4	75	(19.4 - 99.4)	3	33.3	(0.8 - 90.6)
Unprotected well	4	0	(0 - 60.2)	4	0	(0 - 60.2)	3	0.0	(0 - 70.8)
Hand pump	4	0	(0 - 60.2)	4	0	(0 - 60.2)	3	0.0	(0 - 70.8)
Bottled water	4	0	(0 - 60.2)	4	0	(0 - 60.2)	3	0.0	(0 - 70.8)
Tanker	4	0	(0 - 60.2)	4	0	(0 - 60.2)	3	0.0	(0 - 70.8)
Rainwater	4	0	(0 - 60.2)	4	0	(0 - 60.2)	3	0.0	(0 - 70.8)
Other	4	25	(0.6 - 80.6)	4	0	(0 - 60.2)	3	0.0	(0 - 70.8)

2.6 Internet access

During the questionnaire, facility representatives were asked whether the facility has an internet connection.

Table 2.14: Access to internet, ambulatory intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Internet connection	47	8.5	(2.4 - 20.4)	41	2.4	(0.1 - 12.9)	41	2.4	(0.1 - 12.9)

Table 2.15: Access to internet, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Internet connection	13	61.5	(31.6 - 86.1)	15	53.3	(26.6 - 78.7)	16	56.2	(29.9 - 80.2)

Table 2.16: Access to internet, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Internet connection	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	100	(29.2 - 100)

2.7 Situation room reports and graphics - monitoring indicator

CAP and CAIMI health facilities were evaluated on their ability to access data and generate regular reports on immunizations as well as maternal, newborn, and child care. During the observation component of the survey, interviewers observed the presence of graphs or analysis on maternal and neonatal health topics in designated situational rooms. Municipal Health Districts meet the SMI monitoring indicator 7160 if they have at least one graph or analysis on infant care and at least one graph or analysis on maternal/neonatal care. In total, 93.8% of Municipal Health Districts met the requirements for this indicator.

Table 2.17: Situation room graphs and reports monitoring indicator, CAPs and CAIMIs (intervention areas)

	1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI
At least one graph or analysis on infant care:	14	92.9	(66.1 - 99.8)	16	93.8	(69.8 - 99.8)
Vaccination topics	14	92.9	(66.1 - 99.8)	16	93.8	(69.8 - 99.8)
Micronutrient supplementation	14	78.6	(49.2 - 95.3)	16	93.8	(69.8 - 99.8)
At least one graph or analysis on maternal/neonatal care:	14	100.0	(76.8 - 100)	16	100.0	(79.4 - 100)
Distribution of family planning methods	14	100.0	(76.8 - 100)	16	93.8	(69.8 - 99.8)
Prenatal care coverage	14	85.7	(57.2 - 98.2)	16	81.2	(54.4 - 96)
Delivery coverage	14	85.7	(57.2 - 98.2)	16	100.0	(79.4 - 100)
Postpartum care coverage	14	64.3	(35.1 - 87.2)	16	81.2	(54.4 - 96)
Community visits	14	57.1	(28.9 - 82.3)	16	50.0	(24.7 - 75.3)
At least one type of infant & maternal/neonatal care visual	14	92.9	(66.1 - 99.8)	16	93.8	(69.8 - 99.8)

3 Chapter 3: Child and adolescent health

3.1 Child health care services provision

This chapter summarizes key aspects of child health care. In the questionnaire component of the survey, facility representatives were asked about service provision. In the observation component, interviewers observed the setting of the room in which child services are provided, functionality of equipment, stock of pharmacy inputs, stock of vaccines, and related educational materials. Tables 3.1-3.3 display the percentage of facilities that offer child health care services and vaccinations for children under age 5, as reported in the questionnaire. Almost all health facilities in the second follow-up evaluation offer child health care services at the second follow-up. All ambulatory and basic facilities, and 33.3% of complete facilities report also offering vaccinations for children under the age of 5. Tables 3.1-3.3 also display information regarding the type of room the facility uses for child care, which is collected during the observation component of the health facility surveys. Slight discrepancies may exist between responses in the questionnaire and observation.

Table 3.1: Child health care services provision, ambulatory intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Provides childcare services	47	100.0	(92.5 - 100)	41	100.0	(91.4 - 100)	41	100.0	(91.4 - 100)
Vaccinates children under five	47	95.7	(85.5 - 99.5)	41	100.0	(91.4 - 100)	41	100.0	(91.4 - 100)
Childcare area									
Visual and auditory privacy	47	40.4	(26.4 - 55.7)	41	85.4	(70.8 - 94.4)	41	85.4	(70.8 - 94.4)
Non private area	47	4.3	(0.5 - 14.5)	41	2.4	(0.1 - 12.9)	41	12.2	(4.1 - 26.2)
Visual privacy only	47	55.3	(40.1 - 69.8)	41	2.4	(0.1 - 12.9)	41	0.0	(0 - 8.6)
Other	47	0.0	(0 - 7.5)	41	0.0	(0 - 8.6)	41	0.0	(0 - 8.6)
Do not provide service	47	0.0	(0 - 7.5)	41	9.8	(2.7 - 23.1)	41	2.4	(0.1 - 12.9)

Table 3.2: Child health care services provision, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Provides childcare services	13	92.3	(64 - 99.8)	15	100	(78.2 - 100)	17	100.0	(80.5 - 100)
Vaccinates children under five	13	100.0	(75.3 - 100)	15	100	(78.2 - 100)	17	100.0	(80.5 - 100)
Childcare area									
Visual and auditory privacy	12	25.0	(5.5 - 57.2)	14	100	(76.8 - 100)	17	94.1	(71.3 - 99.9)
Non private area	12	16.7	(2.1 - 48.4)	14	0	(0 - 23.2)	17	5.9	(0.1 - 28.7)
Visual privacy only	12	58.3	(27.7 - 84.8)	14	0	(0 - 23.2)	17	0.0	(0 - 19.5)
Other	12	0.0	(0 - 26.5)	14	0	(0 - 23.2)	17	0.0	(0 - 19.5)
Do not provide service	12	0.0	(0 - 26.5)	14	0	(0 - 23.2)	17	0.0	(0 - 19.5)

* Observed childcare area data missing from one basic facility at the baseline and first follow-up.

Table 3.3: Child health care services provision, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Provides childcare services	4	100	(39.8 - 100)	4	75	(19.4 - 99.4)	3	66.7	(9.4 - 99.2)
Vaccinates children under five	4	50	(6.8 - 93.2)	4	50	(6.8 - 93.2)	3	33.3	(0.8 - 90.6)
Childcare area									
Visual and auditory privacy	4	50	(6.8 - 93.2)	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)
Non private area	4	0	(0 - 60.2)	4	0	(0 - 60.2)	3	0.0	(0 - 70.8)
Visual privacy only	4	50	(6.8 - 93.2)	4	0	(0 - 60.2)	3	0.0	(0 - 70.8)
Other	4	0	(0 - 60.2)	4	0	(0 - 60.2)	3	0.0	(0 - 70.8)
Do not provide service	4	0	(0 - 60.2)	4	0	(0 - 60.2)	3	0.0	(0 - 70.8)

3.2 Child health equipment

Specific equipment and drugs are necessary for child health care, as defined by the monitoring indicator for child health care (7010). The equipment included in this indicator can be found in Tables 3.4-3.6 below. Facilities were only included if the interviewer entered into the child care room during the observation. If the facility reported they do not provide such services during the observation, the facility was excluded from this indicator. Interviewers were instructed to observe all equipment and test for functionality (if possible). Unless noted otherwise, the facility only needs to have at least one functioning piece of equipment on the day of the survey. The drugs and vaccines necessary for this child health care monitoring indicator (7010) can be found in sections 3.3 and 3.4.

Table 3.4: Child health care equipment observed and functional, ambulatory intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Scale	47	83.0	(69.2 - 92.4)	37	100.0	(90.5 - 100)	40	97.5	(86.8 - 99.9)
Height rod	47	85.1	(71.7 - 93.8)	37	100.0	(90.5 - 100)	40	100.0	(91.2 - 100)
Stethoscope / pediatric stethoscope	47	85.1	(71.7 - 93.8)	37	100.0	(90.5 - 100)	40	100.0	(91.2 - 100)
Thermometer	47	87.2	(74.3 - 95.2)	37	94.6	(81.8 - 99.3)	40	87.5	(73.2 - 95.8)
All equipment observed and functional	47	57.4	(42.2 - 71.7)	37	94.6	(81.8 - 99.3)	40	85.0	(70.2 - 94.3)

Table 3.5: Child health care equipment observed and functional, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Pediatric scale	12	100.0	(73.5 - 100)	7	100.0	(59 - 100)	17	76.5	(50.1 - 93.2)
Scale	12	100.0	(73.5 - 100)	14	100.0	(76.8 - 100)	17	100.0	(80.5 - 100)
Height rod	12	91.7	(61.5 - 99.8)	14	100.0	(76.8 - 100)	17	100.0	(80.5 - 100)
Pediatric stethoscope	12	8.3	(0.2 - 38.5)	14	42.9	(17.7 - 71.1)	17	64.7	(38.3 - 85.8)
Blood pressure apparatus	12	8.3	(0.2 - 38.5)	14	42.9	(17.7 - 71.1)	17	70.6	(44 - 89.7)
All equipment observed and functional	12	8.3	(0.2 - 38.5)	14	14.3	(1.8 - 42.8)	17	52.9	(27.8 - 77)

* Due to a survey programming error, data about pediatric scales is missing in 7 facilities at the first follow-up. Pediatric scales are excluded in the overall indicator value for these 7 facilities.

Table 3.6: Child health care equipment observed and functional, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Pediatric scale	4	100	(39.8 - 100)	3	66.7	(9.4 - 99.2)	3	100	(29.2 - 100)
Scale	4	100	(39.8 - 100)	4	100.0	(39.8 - 100)	3	100	(29.2 - 100)
Height rod	4	100	(39.8 - 100)	4	100.0	(39.8 - 100)	3	100	(29.2 - 100)
Pediatric stethoscope	4	50	(6.8 - 93.2)	4	25.0	(0.6 - 80.6)	3	100	(29.2 - 100)
Blood pressure apparatus	4	25	(0.6 - 80.6)	4	50.0	(6.8 - 93.2)	3	100	(29.2 - 100)
All equipment observed and functional	4	25	(0.6 - 80.6)	4	25.0	(0.6 - 80.6)	3	100	(29.2 - 100)

3.3 Child health care pharmacy inputs

During the observation component of the survey, interviewers evaluated the presence and stock of pharmacy inputs related to child health care, such as deworming and diarrhea medication. The standards for child health care are determined by the SMI composite child health care indicator (7010). Interviewers were instructed to observe each drug and review any kardex or written documentation for stock-out in the last three months. If the facility did not have three-month stock documentation at the first or second follow-up, the facility was considered to be stocked out of the drug and did not pass that portion of the indicator.

Table 3.7: Child health care drugs and supplements, ambulatory intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Oral rehydration salts	47	80.9	(66.7 - 90.9)	37	91.9	(78.1 - 98.3)	40	80.0	(64.4 - 90.9)
Micronutrients / ferrous sulfate	47	93.6	(82.5 - 98.7)	37	97.3	(85.8 - 99.9)	40	95.0	(83.1 - 99.4)
Zinc sulfate / gluconate	47	59.6	(44.3 - 73.6)	37	78.4	(61.8 - 90.2)	40	85.0	(70.2 - 94.3)
Albendazole / mebendazole	47	57.4	(42.2 - 71.7)	37	97.3	(85.8 - 99.9)	40	97.5	(86.8 - 99.9)
Antibiotics	47	97.9	(88.7 - 99.9)	1	100.0	(2.5 - 100)	-	-	-
All drugs available on day of observation	47	44.7	(30.2 - 59.9)	37	73.0	(55.9 - 86.2)	40	65.0	(48.3 - 79.4)
All drugs available in past three months	47	44.7	(30.2 - 59.9)	37	59.5	(42.1 - 75.2)	40	52.5	(36.1 - 68.5)

* Antibiotics only required at ambulatory facilities with a doctor.

† Three month stock data not available for all drugs at baseline and first follow-up.

Table 3.8: Child health care drugs and supplements, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Oral rehydration salts	12	100.0	(73.5 - 100)	14	92.9	(66.1 - 99.8)	17	100.0	(80.5 - 100)
Micronutrients / ferrous sulfate	12	83.3	(51.6 - 97.9)	14	92.9	(66.1 - 99.8)	17	88.2	(63.6 - 98.5)
Zinc sulfate / gluconate	12	91.7	(61.5 - 99.8)	14	100.0	(76.8 - 100)	17	100.0	(80.5 - 100)
Albendazole / mebendazole	12	75.0	(42.8 - 94.5)	14	92.9	(66.1 - 99.8)	17	94.1	(71.3 - 99.9)
Antibiotics	12	0.0	(0 - 26.5)	14	100.0	(76.8 - 100)	17	94.1	(71.3 - 99.9)
Ringer's lactate / Hartmann's / saline solution	12	100.0	(73.5 - 100)	14	100.0	(76.8 - 100)	17	100.0	(80.5 - 100)
All drugs available on day of observation	12	58.3	(27.7 - 84.8)	14	78.6	(49.2 - 95.3)	17	88.2	(63.6 - 98.5)
All drugs available in past three months	12	58.3	(27.7 - 84.8)	14	57.1	(28.9 - 82.3)	17	76.5	(50.1 - 93.2)

* Three month stock data not available for all drugs at baseline and first follow-up.

Table 3.9: Child health care drugs and supplements, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Oral rehydration salts	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)
Micronutrients / ferrous sulfate	4	50	(6.8 - 93.2)	4	75	(19.4 - 99.4)	3	66.7	(9.4 - 99.2)
Zinc sulfate / gluconate	4	100	(39.8 - 100)	4	75	(19.4 - 99.4)	3	100.0	(29.2 - 100)
Albendazole / mebendazole	4	100	(39.8 - 100)	4	75	(19.4 - 99.4)	3	100.0	(29.2 - 100)
Antibiotics	4	0	(0 - 60.2)	4	100	(39.8 - 100)	3	66.7	(9.4 - 99.2)
Ringer's lactate / Hartman's / saline solution / dextrose	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)
All drugs available on day of observation	4	50	(6.8 - 93.2)	4	50	(6.8 - 93.2)	3	33.3	(0.8 - 90.6)
All drugs available in past three months	4	50	(6.8 - 93.2)	4	0	(0 - 60.2)	3	33.3	(0.8 - 90.6)

* Dextrose not captured at baseline evaluation.

† Three month stock data not available for all drugs at baseline and first follow-up.

3.4 Child health care vaccine provision

During the observation component of the survey, interviewers used registries to evaluate the stock of vaccines administered to children at facilities which store vaccines. The standards for child immunization

are determined by the SMI composite child health care indicator (7010). Interviewers were instructed to observe each vaccine and review any kardex or written documentation for stock-out in the last three months. If the facility did not have three-month stock documentation at the first or second follow-up, the facility was considered to be stocked out of the vaccine and did not pass that portion of the indicator.

Table 3.10: Child health care vaccines, ambulatory intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Pentavalent / (DPT + HiB + HepB)	23	100.0	(85.2 - 100)	29	65.5	(45.7 - 82.1)	35	94.3	(80.8 - 99.3)
Polio	23	95.7	(78.1 - 99.9)	29	44.8	(26.4 - 64.3)	35	88.6	(73.3 - 96.8)
Measles, mumps, rubella	23	100.0	(85.2 - 100)	29	37.9	(20.7 - 57.7)	35	94.3	(80.8 - 99.3)
BCG	23	95.7	(78.1 - 99.9)	29	31.0	(15.3 - 50.8)	35	82.9	(66.4 - 93.4)
Rotavirus	23	95.7	(78.1 - 99.9)	29	44.8	(26.4 - 64.3)	35	94.3	(80.8 - 99.3)
Pneumococcal conjugate	23	100.0	(85.2 - 100)	29	31.0	(15.3 - 50.8)	35	94.3	(80.8 - 99.3)
All vaccines observed day of survey	23	87.0	(66.4 - 97.2)	29	10.3	(2.2 - 27.4)	35	80.0	(63.1 - 91.6)
All vaccines continuously available in past 3 months	23	87.0	(66.4 - 97.2)	29	3.4	(0.1 - 17.8)	35	74.3	(56.7 - 87.5)

* DPT + HepB + Hib not captured as Pentavalent alternatives at baseline and first follow-up.

† Three-month stock data not available for some facilities at baseline evaluation.

Table 3.11: Child health care vaccines, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Pentavalent / (DPT + HiB + HepB)	9	100.0	(66.4 - 100)	13	76.9	(46.2 - 95)	17	88.2	(63.6 - 98.5)
Polio	9	100.0	(66.4 - 100)	13	69.2	(38.6 - 90.9)	17	82.4	(56.6 - 96.2)
Measles, mumps, rubella	9	100.0	(66.4 - 100)	13	53.8	(25.1 - 80.8)	17	82.4	(56.6 - 96.2)
BCG	9	100.0	(66.4 - 100)	13	69.2	(38.6 - 90.9)	17	88.2	(63.6 - 98.5)
Rotavirus	9	100.0	(66.4 - 100)	13	69.2	(38.6 - 90.9)	17	82.4	(56.6 - 96.2)
Pneumococcal conjugate	9	88.9	(51.8 - 99.7)	13	38.5	(13.9 - 68.4)	17	82.4	(56.6 - 96.2)
All vaccines observed day of survey	9	88.9	(51.8 - 99.7)	13	30.8	(9.1 - 61.4)	17	82.4	(56.6 - 96.2)
All vaccines continuously available in past 3 months	9	77.8	(40 - 97.2)	13	30.8	(9.1 - 61.4)	17	58.8	(32.9 - 81.6)

* DPT + HepB + Hib not captured as Pentavalent alternatives at baseline and first follow-up.

† Three-month stock data not available for some facilities at baseline evaluation.

Table 3.12: Child health care vaccines, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Pentavalent / (DPT + Hib + HepB)	3	33.3	(0.8 - 90.6)	2	50	(1.3 - 98.7)	2	100	(15.8 - 100)
Polio	3	33.3	(0.8 - 90.6)	2	50	(1.3 - 98.7)	2	50	(1.3 - 98.7)
Measles, mumps, rubella	3	33.3	(0.8 - 90.6)	2	50	(1.3 - 98.7)	2	50	(1.3 - 98.7)
BCG	3	100.0	(29.2 - 100)	2	100	(15.8 - 100)	2	100	(15.8 - 100)
Rotavirus	3	33.3	(0.8 - 90.6)	2	50	(1.3 - 98.7)	2	50	(1.3 - 98.7)
Pneumococcal conjugate	3	33.3	(0.8 - 90.6)	2	0	(0 - 84.2)	2	50	(1.3 - 98.7)
All vaccines observed day of survey	3	33.3	(0.8 - 90.6)	2	0	(0 - 84.2)	2	50	(1.3 - 98.7)
All vaccines continuously available in past 3 months	3	33.3	(0.8 - 90.6)	2	0	(0 - 84.2)	2	50	(1.3 - 98.7)

* DPT + HepB + Hib not captured as Pentavalent alternatives at baseline and first follow-up.

† Three-month stock data not available for some facilities at baseline evaluation.

3.5 Composite child health care indicator

The tables below display composite performance in the SMI child health care indicator (7010). Facilities are evaluated on availability and functionality of equipment, continuous availability of pharmacy inputs, and continuous availability of vaccines (at facilities which store vaccines). At baseline and first follow-up evaluations, three month vaccine stock was only captured for the BCG and MMR vaccines. Vaccine stock was only captured at facilities which indicated that they store vaccines and for which a vaccine registry was observed.

Table 3.13: Child health care composite indicator, ambulatory intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
All equipment observed and functional	47	57.4	(42.2 - 71.7)	37	94.6	(81.8 - 99.3)	40	85.0	(70.2 - 94.3)
All pharmacy inputs observed day of survey	47	44.7	(30.2 - 59.9)	37	73.0	(55.9 - 86.2)	40	65.0	(48.3 - 79.4)
All pharmacy inputs continuously available in past three months	47	44.7	(30.2 - 59.9)	37	59.5	(42.1 - 75.2)	40	52.5	(36.1 - 68.5)
All vaccines continuously observed day of survey	23	87.0	(66.4 - 97.2)	29	10.3	(2.2 - 27.4)	35	80.0	(63.1 - 91.6)
All vaccines continuously available in past three months	23	87.0	(66.4 - 97.2)	29	3.4	(0.1 - 17.8)	35	74.3	(56.7 - 87.5)
Child health care provision according to standard	47	19.1	(9.1 - 33.3)	37	5.4	(0.7 - 18.2)	40	37.5	(22.7 - 54.2)

* Three month stock data not available for all drugs and vaccines at baseline and first follow-up.

Table 3.14: Child health care composite indicator, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
All equipment observed and functional	12	8.3	(0.2 - 38.5)	14	14.3	(1.8 - 42.8)	17	52.9	(27.8 - 77)
All pharmacy inputs observed day of survey	12	58.3	(27.7 - 84.8)	14	78.6	(49.2 - 95.3)	17	88.2	(63.6 - 98.5)
All pharmacy inputs continuously available in past three months	12	58.3	(27.7 - 84.8)	14	57.1	(28.9 - 82.3)	17	76.5	(50.1 - 93.2)
All vaccines continuously observed day of survey	9	88.9	(51.8 - 99.7)	13	30.8	(9.1 - 61.4)	17	82.4	(56.6 - 96.2)
All vaccines continuously available in past three months	9	77.8	(40 - 97.2)	13	30.8	(9.1 - 61.4)	17	58.8	(32.9 - 81.6)
Child health care provision according to standard	12	0.0	(0 - 26.5)	14	0.0	(0 - 23.2)	17	17.6	(3.8 - 43.4)

* Three month stock data not available for all drugs and vaccines at baseline and first follow-up.

Table 3.15: Child health care composite indicator, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
All equipment observed and functional	4	25.0	(0.6 - 80.6)	4	25	(0.6 - 80.6)	3	100.0	(29.2 - 100)
All pharmacy inputs observed day of survey	4	50.0	(6.8 - 93.2)	4	50	(6.8 - 93.2)	3	33.3	(0.8 - 90.6)
All pharmacy inputs continuously available in past three months	4	50.0	(6.8 - 93.2)	4	0	(0 - 60.2)	3	33.3	(0.8 - 90.6)
All vaccines continuously observed day of survey	3	33.3	(0.8 - 90.6)	2	0	(0 - 84.2)	2	50.0	(1.3 - 98.7)
All vaccines continuously available in past three months	3	33.3	(0.8 - 90.6)	2	0	(0 - 84.2)	2	50.0	(1.3 - 98.7)
Child health care provision according to standard	4	0.0	(0 - 60.2)	4	0	(0 - 60.2)	3	33.3	(0.8 - 90.6)

* Three month stock data not available for all drugs and vaccines at baseline and first follow-up.

3.6 Medical record review: growth and development check-ups

During medical record review, surveyors evaluated child growth and development records of children under two years of age at ambulatory and basic facilities in the past year. According to the SMI growth and development monitoring indicator 8610, children 0-23 months of age should have height and weight recorded as well as health counseling during a visit in the last year. This indicator was only captured at the first and second follow-up evaluation rounds.

Table 3.16: Growth and development monitoring indicator, ambulatory intervention facilities

	1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI
Height recorded	412	98.8	(97.2 - 99.6)	331	91.5	(88 - 94.3)
Weight recorded	412	99.8	(98.7 - 100)	331	92.1	(88.7 - 94.8)
Counseling	412	78.6	(74.4 - 82.5)	331	86.7	(82.6 - 90.2)
Growth and development visit according to standard	412	78.4	(74.1 - 82.3)	331	86.1	(81.9 - 89.6)

Table 3.17: Growth and development monitoring indicator, basic intervention facilities

	1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI
Height recorded	146	100.0	(97.5 - 100)	150	100	(97.6 - 100)
Weight recorded	146	100.0	(97.5 - 100)	150	100	(97.6 - 100)
Counseling	146	88.4	(82 - 93.1)	150	98	(94.3 - 99.6)
Growth and development visit according to standard	146	88.4	(82 - 93.1)	150	98	(94.3 - 99.6)

Table 3.18: Growth and development monitoring indicator, complete intervention facilities

	2nd Follow-Up		
	N	%	CI
Height recorded	10	100	(69.2 - 100)
Weight recorded	10	100	(69.2 - 100)
Counseling	10	100	(69.2 - 100)
Growth and development visit according to standard	10	100	(69.2 - 100)

4 Chapter 4: Immunization services

4.1 Immunization services provision

This chapter summarizes key aspects of immunization services. In the questionnaire component of the survey, facility representatives were asked about service provision as well as vaccine logistics. In the observation component, interviewers observed the setting of the room in which immunizations are provided, as well as the availability and stock of vaccines.

Table 4.1: Immunization services provision, ambulatory intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Vaccinates children under five	47	95.7	(85.5 - 99.5)	41	100.0	(91.4 - 100)	41	100.0	(91.4 - 100)
Immunization area									
Visual and auditory privacy	46	30.4	(17.7 - 45.8)	41	80.5	(65.1 - 91.2)	41	90.2	(76.9 - 97.3)
Non private area	46	19.6	(9.4 - 33.9)	41	12.2	(4.1 - 26.2)	41	9.8	(2.7 - 23.1)
Visual privacy only	46	39.1	(25.1 - 54.6)	41	0.0	(0 - 8.6)	41	0.0	(0 - 8.6)
Other	46	4.3	(0.5 - 14.8)	41	0.0	(0 - 8.6)	41	0.0	(0 - 8.6)
Do not provide service	46	6.5	(1.4 - 17.9)	41	7.3	(1.5 - 19.9)	41	0.0	(0 - 8.6)

* Immunization area data missing from one facility at the baseline.

Table 4.2: Immunization services provision, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Vaccinates children under five	13	100.0	(75.3 - 100)	15	100.0	(78.2 - 100)	17	100.0	(80.5 - 100)
Immunization area									
Visual and auditory privacy	13	30.8	(9.1 - 61.4)	15	93.3	(68.1 - 99.8)	17	94.1	(71.3 - 99.9)
Non private area	13	23.1	(5 - 53.8)	15	0.0	(0 - 21.8)	17	0.0	(0 - 19.5)
Visual privacy only	13	46.2	(19.2 - 74.9)	15	0.0	(0 - 21.8)	17	0.0	(0 - 19.5)
Other	13	0.0	(0 - 24.7)	15	0.0	(0 - 21.8)	17	0.0	(0 - 19.5)
Do not provide service	13	0.0	(0 - 24.7)	15	6.7	(0.2 - 31.9)	17	5.9	(0.1 - 28.7)

Table 4.3: Immunization services provision, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Vaccinates children under five	4	50	(6.8 - 93.2)	4	50	(6.8 - 93.2)	3	33.3	(0.8 - 90.6)
Immunization area									
Visual and auditory privacy	4	50	(6.8 - 93.2)	4	50	(6.8 - 93.2)	3	100.0	(29.2 - 100)
Non private area	4	0	(0 - 60.2)	4	0	(0 - 60.2)	3	0.0	(0 - 70.8)
Visual privacy only	4	0	(0 - 60.2)	4	0	(0 - 60.2)	3	0.0	(0 - 70.8)
Other	4	25	(0.6 - 80.6)	4	0	(0 - 60.2)	3	0.0	(0 - 70.8)
Do not provide service	4	25	(0.6 - 80.6)	4	50	(6.8 - 93.2)	3	0.0	(0 - 70.8)

4.2 Vaccine logistics: storage

In the questionnaire component of the survey, interviewers asked facility representative about vaccine storage methods at facilities which provide immunization services to children under five.

Table 4.4: Vaccine storage (if provided), ambulatory intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Stores vaccines	45	64.4	(48.8 - 78.1)	41	75.6	(59.7 - 87.6)	41	95.1	(83.5 - 99.4)
Collected from another health facility	45	24.4	(12.9 - 39.5)	41	24.4	(12.4 - 40.3)	41	4.9	(0.6 - 16.5)
Delivered when immunization services provided	45	11.1	(3.7 - 24.1)	41	0.0	(0 - 8.6)	41	0.0	(0 - 8.6)
Does not store vaccines	45	0.0	(0 - 7.9)	41	0.0	(0 - 8.6)	41	0.0	(0 - 8.6)
Don't know / did not respond	45	0.0	(0 - 7.9)	41	0.0	(0 - 8.6)	41	0.0	(0 - 8.6)

Table 4.5: Vaccine storage (if provided), basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Stores vaccines	13	100	(75.3 - 100)	15	100	(78.2 - 100)	17	100	(80.5 - 100)
Collected from another health facility	13	0	(0 - 24.7)	15	0	(0 - 21.8)	17	0	(0 - 19.5)
Delivered when immunization services provided	13	0	(0 - 24.7)	15	0	(0 - 21.8)	17	0	(0 - 19.5)
Does not store vaccines	13	0	(0 - 24.7)	15	0	(0 - 21.8)	17	0	(0 - 19.5)
Don't know / did not respond	13	0	(0 - 24.7)	15	0	(0 - 21.8)	17	0	(0 - 19.5)

Table 4.6: Vaccine storage (if provided), complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Stores vaccines	2	50	(1.3 - 98.7)	3	100	(29.2 - 100)	3	100	(29.2 - 100)
Collected from another health facility	2	0	(0 - 84.2)	3	0	(0 - 70.8)	3	0	(0 - 70.8)
Delivered when immunization services provided	2	50	(1.3 - 98.7)	3	0	(0 - 70.8)	3	0	(0 - 70.8)
Does not store vaccines	2	0	(0 - 84.2)	3	0	(0 - 70.8)	3	0	(0 - 70.8)
Don't know / did not respond	2	0	(0 - 84.2)	3	0	(0 - 70.8)	3	0	(0 - 70.8)

4.3 Vaccine logistics: supply

Among those facilities which provide immunization services to children under five and store vaccines, representatives were also asked about vaccine supply logistics.

Table 4.7: Vaccine supply, ambulatory intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Ordering strategy									
Determines own need	29	96.6	(82.2 - 99.9)	31	87.1	(70.2 - 96.4)	39	97.4	(86.5 - 99.9)
Need determined elsewhere	29	3.4	(0.1 - 17.8)	31	0.0	(0 - 11.2)	39	2.6	(0.1 - 13.5)
Both (differ by vaccine)	29	0.0	(0 - 11.9)	31	12.9	(3.6 - 29.8)	39	0.0	(0 - 9)
Time to receive supplies									
One day	29	41.4	(23.5 - 61.1)	31	38.7	(21.8 - 57.8)	38	60.5	(43.4 - 76)
2 - 7 days	29	24.1	(10.3 - 43.5)	31	22.6	(9.6 - 41.1)	38	7.9	(1.7 - 21.4)
More than one week	29	27.6	(12.7 - 47.2)	31	29.0	(14.2 - 48)	38	26.3	(13.4 - 43.1)
Reception of quantity ordered									
Always	29	82.8	(64.2 - 94.2)	31	16.1	(5.5 - 33.7)	39	53.8	(37.2 - 69.9)
Almost always	29	13.8	(3.9 - 31.7)	31	71.0	(52 - 85.8)	39	43.6	(27.8 - 60.4)
Almost never	29	3.4	(0.1 - 17.8)	31	12.9	(3.6 - 29.8)	39	2.6	(0.1 - 13.5)

* One facility at second follow-up responded 'do not know' to reception time and was excluded.

Table 4.8: Vaccine supply, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Ordering strategy									
Determines own need	13	92.3	(64 - 99.8)	15	100.0	(78.2 - 100)	17	88.2	(63.6 - 98.5)
Need determined elsewhere	13	0.0	(0 - 24.7)	15	0.0	(0 - 21.8)	17	0.0	(0 - 19.5)
Both (differ by vaccine)	13	7.7	(0.2 - 36)	15	0.0	(0 - 21.8)	17	11.8	(1.5 - 36.4)
Time to receive supplies									
One day	13	84.6	(54.6 - 98.1)	15	93.3	(68.1 - 99.8)	17	64.7	(38.3 - 85.8)
2 - 7 days	13	15.4	(1.9 - 45.4)	15	6.7	(0.2 - 31.9)	17	11.8	(1.5 - 36.4)
More than one week	13	0.0	(0 - 24.7)	15	0.0	(0 - 21.8)	17	17.6	(3.8 - 43.4)
Reception of quantity ordered									
Always	12	58.3	(27.7 - 84.8)	15	6.7	(0.2 - 31.9)	17	70.6	(44 - 89.7)
Almost always	12	33.3	(9.9 - 65.1)	15	66.7	(38.4 - 88.2)	17	29.4	(10.3 - 56)
Almost never	12	8.3	(0.2 - 38.5)	15	26.7	(7.8 - 55.1)	17	0.0	(0 - 19.5)

* One facility at baseline responded 'do not know' to reception time and was excluded.

Table 4.9: Vaccine supply, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Ordering strategy									
Determines own need	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)	3	100	(29.2 - 100)
Need determined elsewhere	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)	3	0	(0 - 70.8)
Both (differ by vaccine)	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)	3	0	(0 - 70.8)
Time to receive supplies									
One day	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)	3	100	(29.2 - 100)
2 - 7 days	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)	3	0	(0 - 70.8)
More than one week	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)	3	0	(0 - 70.8)
Reception of quantity ordered									
Always	1	100	(2.5 - 100)	3	33.3	(0.8 - 90.6)	3	100	(29.2 - 100)
Almost always	1	0	(0 - 97.5)	3	66.7	(9.4 - 99.2)	3	0	(0 - 70.8)
Almost never	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)	3	0	(0 - 70.8)

4.4 Refrigerators for vaccine storage

In the observation component of the survey, interviewers observed the number and type of refrigerator used to store vaccines. Only facilities that either store, collect from other health units or have vaccines delivered immediately before application are displayed below. Facilities may have more than one type of fridge.

Table 4.10: Vaccine storage equipment, ambulatory intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Electric fridge	32	96.9	(83.8 - 99.9)	36	94.4	(81.3 - 99.3)	40	97.5	(86.8 - 99.9)
Kerosene fridge	32	93.8	(79.2 - 99.2)	36	0.0	(0 - 9.7)	40	2.5	(0.1 - 13.2)
Gas fridge	32	87.5	(71 - 96.5)	36	8.3	(1.8 - 22.5)	40	2.5	(0.1 - 13.2)
Solar fridge	32	93.8	(79.2 - 99.2)	36	0.0	(0 - 9.7)	40	0.0	(0 - 8.8)
Cold box	32	93.8	(79.2 - 99.2)	36	83.3	(67.2 - 93.6)	40	60.0	(43.3 - 75.1)

Table 4.11: Vaccine storage equipment, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Electric fridge	13	92.3	(64 - 99.8)	15	86.7	(59.5 - 98.3)	17	100.0	(80.5 - 100)
Kerosene fridge	13	84.6	(54.6 - 98.1)	15	0.0	(0 - 21.8)	17	11.8	(1.5 - 36.4)
Gas fridge	13	69.2	(38.6 - 90.9)	15	0.0	(0 - 21.8)	17	0.0	(0 - 19.5)
Solar fridge	13	84.6	(54.6 - 98.1)	15	0.0	(0 - 21.8)	17	11.8	(1.5 - 36.4)
Cold box	13	100.0	(75.3 - 100)	15	86.7	(59.5 - 98.3)	17	100.0	(80.5 - 100)

Table 4.12: Vaccine storage equipment, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Electric fridge	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Kerosene fridge	4	75	(19.4 - 99.4)	3	0.0	(0 - 70.8)	3	33.3	(0.8 - 90.6)
Gas fridge	4	75	(19.4 - 99.4)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)
Solar fridge	4	75	(19.4 - 99.4)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)
Cold box	4	75	(19.4 - 99.4)	3	66.7	(9.4 - 99.2)	3	100.0	(29.2 - 100)

4.5 Vaccines observed

In the observation component of the survey, interviewers observed vaccine stock on the day of the survey according to vaccine registries. Vaccine stock was only evaluated at facilities which indicated that vaccines are stored on-site or are transported to the facility directly before use, and for which vaccine registries were available. These tables differ from the vaccine tables found in chapter 3 because they are not

constrained to facilities that provide child care services. They also display all vaccines captured in the survey, and not just those required for the child health immunization component of the 7010 monitoring indicator.

Table 4.13: Vaccines observed, ambulatory intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Pentavalent (DPT + HepB + Hib)	23	100.0	(85.2 - 100)	31	64.5	(45.4 - 80.8)	38	94.7	(82.3 - 99.4)
Polio	23	95.7	(78.1 - 99.9)	31	48.4	(30.2 - 66.9)	38	86.8	(71.9 - 95.6)
Measles, mumps, rubella	23	100.0	(85.2 - 100)	31	38.7	(21.8 - 57.8)	38	94.7	(82.3 - 99.4)
Rotavirus	23	95.7	(78.1 - 99.9)	31	45.2	(27.3 - 64)	38	94.7	(82.3 - 99.4)
Pneumococcal conjugate	23	100.0	(85.2 - 100)	31	32.3	(16.7 - 51.4)	38	94.7	(82.3 - 99.4)
BCG	23	95.7	(78.1 - 99.9)	31	32.3	(16.7 - 51.4)	38	78.9	(62.7 - 90.4)
Influenza	23	78.3	(56.3 - 92.5)	31	51.6	(33.1 - 69.8)	38	42.1	(26.3 - 59.2)
Tetanus	23	95.7	(78.1 - 99.9)	31	87.1	(70.2 - 96.4)	38	94.7	(82.3 - 99.4)

* DPT + HepB + Hib not captured as Pentavalent alternatives at baseline and first follow-up.

Table 4.14: Vaccines observed, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Pentavalent (DPT + HepB + Hib)	10	100	(69.2 - 100)	14	78.6	(49.2 - 95.3)	17	88.2	(63.6 - 98.5)
Polio	10	100	(69.2 - 100)	14	64.3	(35.1 - 87.2)	17	82.4	(56.6 - 96.2)
Measles, mumps, rubella	10	100	(69.2 - 100)	14	50.0	(23 - 77)	17	82.4	(56.6 - 96.2)
Rotavirus	10	100	(69.2 - 100)	14	64.3	(35.1 - 87.2)	17	82.4	(56.6 - 96.2)
Pneumococcal conjugate	10	90	(55.5 - 99.7)	14	35.7	(12.8 - 64.9)	17	82.4	(56.6 - 96.2)
BCG	10	100	(69.2 - 100)	14	71.4	(41.9 - 91.6)	17	88.2	(63.6 - 98.5)
Influenza	10	50	(18.7 - 81.3)	14	85.7	(57.2 - 98.2)	17	23.5	(6.8 - 49.9)
Tetanus	10	90	(55.5 - 99.7)	14	92.9	(66.1 - 99.8)	17	88.2	(63.6 - 98.5)

* DPT + HepB + Hib not captured as Pentavalent alternatives at baseline and first follow-up.

Table 4.15: Vaccines observed, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Pentavalent (DPT + HepB + Hib)	3	33.3	(0.8 - 90.6)	2	50	(1.3 - 98.7)	3	66.7	(9.4 - 99.2)
Polio	3	33.3	(0.8 - 90.6)	2	50	(1.3 - 98.7)	3	33.3	(0.8 - 90.6)
Measles, mumps, rubella	3	33.3	(0.8 - 90.6)	2	50	(1.3 - 98.7)	3	33.3	(0.8 - 90.6)
Rotavirus	3	33.3	(0.8 - 90.6)	2	50	(1.3 - 98.7)	3	33.3	(0.8 - 90.6)
Pneumococcal conjugate	3	33.3	(0.8 - 90.6)	2	0	(0 - 84.2)	3	33.3	(0.8 - 90.6)
BCG	3	100.0	(29.2 - 100)	2	100	(15.8 - 100)	3	100.0	(29.2 - 100)
Influenza	3	0.0	(0 - 70.8)	2	50	(1.3 - 98.7)	3	33.3	(0.8 - 90.6)
Tetanus	3	100.0	(29.2 - 100)	2	50	(1.3 - 98.7)	3	66.7	(9.4 - 99.2)

* DPT + HepB + Hib not captured as Pentavalent alternatives at baseline and first follow-up.

5 Chapter 5: Family planning services

5.1 Family planning services provision

This chapter summarizes key aspects of family planning services. In the questionnaire component of the survey, facility representatives were asked about family planning service provision. In the observation component, interviewers observed the setting of the room in which family planning services are provided, as well as the availability and stock of family planning methods.

Table 5.1: Family planning services provision, ambulatory intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Offers family planning services	47	95.7	(85.5 - 99.5)	41	100.0	(91.4 - 100)	41	100.0	(91.4 - 100)
Family planning area									
Visual and auditory privacy	47	44.7	(30.2 - 59.9)	41	73.2	(57.1 - 85.8)	41	97.6	(87.1 - 99.9)
Non private area	47	4.3	(0.5 - 14.5)	41	14.6	(5.6 - 29.2)	41	2.4	(0.1 - 12.9)
Visual privacy only	47	48.9	(34.1 - 63.9)	41	0.0	(0 - 8.6)	41	0.0	(0 - 8.6)
Other	47	2.1	(0.1 - 11.3)	41	2.4	(0.1 - 12.9)	41	0.0	(0 - 8.6)
Do not provide service	47	0.0	(0 - 7.5)	41	9.8	(2.7 - 23.1)	41	0.0	(0 - 8.6)

Table 5.2: Family planning services provision, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Offers family planning services	13	100.0	(75.3 - 100)	15	100	(78.2 - 100)	17	100	(80.5 - 100)
Family planning area									
Visual and auditory privacy	13	38.5	(13.9 - 68.4)	15	100	(78.2 - 100)	17	100	(80.5 - 100)
Non private area	13	0.0	(0 - 24.7)	15	0	(0 - 21.8)	17	0	(0 - 19.5)
Visual privacy only	13	61.5	(31.6 - 86.1)	15	0	(0 - 21.8)	17	0	(0 - 19.5)
Other	13	0.0	(0 - 24.7)	15	0	(0 - 21.8)	17	0	(0 - 19.5)
Do not provide service	13	0.0	(0 - 24.7)	15	0	(0 - 21.8)	17	0	(0 - 19.5)

Table 5.3: Family planning services provision, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Offers family planning services	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	100	(29.2 - 100)
Family planning area									
Visual and auditory privacy	4	25	(0.6 - 80.6)	4	50	(6.8 - 93.2)	3	100	(29.2 - 100)
Non private area	4	0	(0 - 60.2)	4	25	(0.6 - 80.6)	3	0	(0 - 70.8)
Visual privacy only	4	75	(19.4 - 99.4)	4	0	(0 - 60.2)	3	0	(0 - 70.8)
Other	4	0	(0 - 60.2)	4	25	(0.6 - 80.6)	3	0	(0 - 70.8)
Do not provide service	4	0	(0 - 60.2)	4	0	(0 - 60.2)	3	0	(0 - 70.8)

5.2 Family planning services composite monitoring indicator

The family planning services composite indicator (7050) evaluates whether facilities have continuous three-month availability of appropriate contraceptive methods. The following table shows composite indicator performance among these facilities.

Table 5.4: Family planning composite indicator, ambulatory intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Male condom	45	80.0	(65.4 - 90.4)	37	91.9	(78.1 - 98.3)	40	42.5	(27 - 59.1)
Any oral pill	45	68.9	(53.4 - 81.8)	37	97.3	(85.8 - 99.9)	40	95.0	(83.1 - 99.4)
Any injectable	45	97.8	(88.2 - 99.9)	37	100.0	(90.5 - 100)	40	97.5	(86.8 - 99.9)
All methods continuously in stock in past three months	45	62.2	(46.5 - 76.2)	37	81.1	(64.8 - 92)	40	22.5	(10.8 - 38.5)
Family planning services according to SMI standard	45	62.2	(46.5 - 76.2)	37	81.1	(64.8 - 92)	40	20.0	(9.1 - 35.6)

* Three-month stock data unavailable for some facilities at baseline.

Table 5.5: Family planning composite indicator, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Male condom	13	92.3	(64 - 99.8)	15	100.0	(78.2 - 100)	17	58.8	(32.9 - 81.6)
Any oral pill	13	100.0	(75.3 - 100)	15	86.7	(59.5 - 98.3)	17	88.2	(63.6 - 98.5)
Any injectable	13	100.0	(75.3 - 100)	15	100.0	(78.2 - 100)	17	100.0	(80.5 - 100)
Intrauterine device	13	69.2	(38.6 - 90.9)	15	93.3	(68.1 - 99.8)	17	88.2	(63.6 - 98.5)
All methods continuously in stock in past three months	13	53.8	(25.1 - 80.8)	15	66.7	(38.4 - 88.2)	17	11.8	(1.5 - 36.4)
Family planning services according to SMI standard	13	53.8	(25.1 - 80.8)	15	66.7	(38.4 - 88.2)	17	11.8	(1.5 - 36.4)

* Three-month stock only evaluated for condoms, pills, and injectables at baseline evaluation.

† Three-month stock data unavailable for some facilities at baseline.

Table 5.6: Family planning services composite indicator, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Male condom	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	66.7	(9.4 - 99.2)
Any oral pill	4	75	(19.4 - 99.4)	4	50	(6.8 - 93.2)	3	100.0	(29.2 - 100)
Any injectable	4	100	(39.8 - 100)	4	75	(19.4 - 99.4)	3	100.0	(29.2 - 100)
Intrauterine device	4	75	(19.4 - 99.4)	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)
All methods continuously in stock in past three months	4	75	(19.4 - 99.4)	4	50	(6.8 - 93.2)	3	0.0	(0 - 70.8)
Family planning services according to SMI standard	4	75	(19.4 - 99.4)	4	50	(6.8 - 93.2)	3	0.0	(0 - 70.8)

* Three-month stock only evaluated for condoms, pills, and injectables at baseline evaluation.

† Three-month stock data unavailable for some facilities at baseline.

5.3 Family planning procedures and surgeries

During the questionnaire component of the survey, interviewers assessed the capability of staff to perform family planning procedures and surgeries at basic and complete facilities.

Table 5.7: Family planning procedures and surgeries, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Doctor trained in IUD insertion	-	-	-	15	80.0	(51.9 - 95.7)	17	70.6	(44 - 89.7)
Nurse trained in IUD insertion	-	-	-	-	-	-	17	64.7	(38.3 - 85.8)
Doctor trained in implant insertion	-	-	-	-	-	-	17	70.6	(44 - 89.7)
Nurse trained in implant insertion	-	-	-	-	-	-	17	64.7	(38.3 - 85.8)
Doctor trained in tubal ligation	13	7.7	(0.2 - 36)	15	20.0	(4.3 - 48.1)	17	17.6	(3.8 - 43.4)
Doctor trained in vasectomy	13	0.0	(0 - 24.7)	15	6.7	(0.2 - 31.9)	17	11.8	(1.5 - 36.4)

* IUD/implant insertion training data not captured at baseline.

† Implant insertion training data not captured at first follow-up.

Table 5.8: Family planning procedures and surgeries, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Doctor trained in IUD insertion	-	-	-	4	100	(39.8 - 100)	3	100	(29.2 - 100)
Nurse trained in IUD insertion	-	-	-	-	-	-	3	100	(29.2 - 100)
Doctor trained in implant insertion	-	-	-	-	-	-	3	100	(29.2 - 100)
Nurse trained in implant insertion	-	-	-	-	-	-	3	100	(29.2 - 100)
Doctor trained in tubal ligation	4	75	(19.4 - 99.4)	4	100	(39.8 - 100)	3	100	(29.2 - 100)
Doctor trained in vasectomy	4	50	(6.8 - 93.2)	4	75	(19.4 - 99.4)	3	100	(29.2 - 100)

* IUD/implant insertion training data not captured at baseline.

† Implant insertion training data not captured at first follow-up.

6 Chapter 6: Maternal health: antenatal care (ANC), delivery, and postpartum care (PPC)

6.1 Service provision

This chapter summarizes key aspects of maternal health. Interviewers observed the functionality of equipment, the continuous availability of drugs and supplements, and key lab inputs related to the provision of antenatal, delivery, and postpartum care. In addition to the questionnaire and observation component of the survey, interviewers reviewed antenatal care medical records in ambulatory facilities, as well as delivery and postpartum care medical records in complete facilities.

Table 6.1: Antenatal care service provision, ambulatory intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Offers antenatal care services	47	97.9	(88.7 - 99.9)	41	100.0	(91.4 - 100)	41	97.6	(87.1 - 99.9)
Antenatal care area									
Visual and auditory privacy	47	48.9	(34.1 - 63.9)	41	85.4	(70.8 - 94.4)	41	92.7	(80.1 - 98.5)
Visual privacy only	47	51.1	(36.1 - 65.9)	41	2.4	(0.1 - 12.9)	41	0.0	(0 - 8.6)
Non private area	47	0.0	(0 - 7.5)	41	4.9	(0.6 - 16.5)	41	4.9	(0.6 - 16.5)
Do not provide service	47	0.0	(0 - 7.5)	41	7.3	(1.5 - 19.9)	41	2.4	(0.1 - 12.9)

Table 6.2: Antenatal care service provision, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Offers antenatal care services	13	100.0	(75.3 - 100)	15	100.0	(78.2 - 100)	17	100.0	(80.5 - 100)
Offers (non-urgent) delivery services	13	92.3	(64 - 99.8)	15	93.3	(68.1 - 99.8)	17	100.0	(80.5 - 100)
Antenatal care area									
Visual and auditory privacy	13	53.8	(25.1 - 80.8)	15	100.0	(78.2 - 100)	17	94.1	(71.3 - 99.9)
Visual privacy only	13	46.2	(19.2 - 74.9)	15	0.0	(0 - 21.8)	17	0.0	(0 - 19.5)
Non private area	13	0.0	(0 - 24.7)	15	0.0	(0 - 21.8)	17	5.9	(0.1 - 28.7)
Do not provide service	13	0.0	(0 - 24.7)	15	0.0	(0 - 21.8)	17	0.0	(0 - 19.5)
Delivery area									
Visual and auditory privacy	13	53.8	(25.1 - 80.8)	14	100.0	(76.8 - 100)	17	100.0	(80.5 - 100)
Visual privacy only	13	23.1	(5 - 53.8)	14	0.0	(0 - 23.2)	17	0.0	(0 - 19.5)
Non private area	13	23.1	(5 - 53.8)	14	0.0	(0 - 23.2)	17	0.0	(0 - 19.5)
Do not provide service	13	0.0	(0 - 24.7)	14	0.0	(0 - 23.2)	17	0.0	(0 - 19.5)

* One facility at the first follow-up refused to show the delivery area.

Table 6.3: Antenatal care service provision, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Offers antenatal care services	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	100	(29.2 - 100)
Offers (non-urgent) delivery services	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	100	(29.2 - 100)
Antenatal care area									
Visual and auditory privacy	4	50	(6.8 - 93.2)	4	100	(39.8 - 100)	3	100	(29.2 - 100)
Visual privacy only	4	50	(6.8 - 93.2)	4	0	(0 - 60.2)	3	0	(0 - 70.8)
Non private area	4	0	(0 - 60.2)	4	0	(0 - 60.2)	3	0	(0 - 70.8)
Do not provide service	4	0	(0 - 60.2)	4	0	(0 - 60.2)	3	0	(0 - 70.8)
Delivery area									
Visual and auditory privacy	4	0	(0 - 60.2)	4	100	(39.8 - 100)	3	100	(29.2 - 100)
Visual privacy only	4	50	(6.8 - 93.2)	4	0	(0 - 60.2)	3	0	(0 - 70.8)
Non private area	4	50	(6.8 - 93.2)	4	0	(0 - 60.2)	3	0	(0 - 70.8)
Do not provide service	4	0	(0 - 60.2)	4	0	(0 - 60.2)	3	0	(0 - 70.8)

6.2 ANC and PNC equipment

Specific equipment, drugs, and laboratory inputs are necessary for antenatal and postpartum care, as defined by the monitoring indicator for ANC/PPC (7020). Facilities were only included in the indicator if they entered into the ANC/PPC room during the observation. If the facility reported they do not provide such services during the observation, the facility was excluded from this indicator. Interviewers were instructed to observe and test for functionality (if possible) and, unless noted otherwise, the facility only needs to have at least one functioning piece of equipment on the day of the survey. Tables 6.4-6.6 list the equipment and percent of facilities that meet each component. The drugs and laboratory inputs necessary for child health care can be found in sections 6.3 and 6.4.

Table 6.4: Antenatal/postnatal care equipment observed and functional, ambulatory intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Scale with measuring rod	47	59.6	(44.3 - 73.6)	38	97.4	(86.2 - 99.9)	40	97.5	(86.8 - 99.9)
Gynecological exam table	47	80.9	(66.7 - 90.9)	38	65.8	(48.6 - 80.4)	40	100.0	(91.2 - 100)
CLAP obstetric tape / measuring tape	47	70.2	(55.1 - 82.7)	38	92.1	(78.6 - 98.3)	40	100.0	(91.2 - 100)
Lamp	47	46.8	(32.1 - 61.9)	38	65.8	(48.6 - 80.4)	40	97.5	(86.8 - 99.9)
Sphygmomanometer	47	80.9	(66.7 - 90.9)	38	100.0	(90.7 - 100)	40	97.5	(86.8 - 99.9)
Stethoscope	47	85.1	(71.7 - 93.8)	38	100.0	(90.7 - 100)	40	100.0	(91.2 - 100)
Perinatal maternal medical history form	47	93.6	(82.5 - 98.7)	38	100.0	(90.7 - 100)	40	92.5	(79.6 - 98.4)
Glycemia test	-	-	-	1	100.0	(2.5 - 100)	40	7.5	(1.6 - 20.4)
All ANC equipment observed and functioning	47	19.1	(9.1 - 33.3)	38	42.1	(26.3 - 59.2)	40	85.0	(70.2 - 94.3)

* Stretcher is used as an alternative to gynecological exam table for ambulatory facilities without a doctor.

† Glycemia test only required at facilities with a doctor.

Table 6.5: Antenatal/postnatal care equipment observed and functional, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Scale with measuring rod	13	100.0	(75.3 - 100)	14	85.7	(57.2 - 98.2)	17	100.0	(80.5 - 100)
Gynecological exam table	13	84.6	(54.6 - 98.1)	14	78.6	(49.2 - 95.3)	17	82.4	(56.6 - 96.2)
CLAP obstetric tape / measuring tape	13	84.6	(54.6 - 98.1)	14	92.9	(66.1 - 99.8)	17	100.0	(80.5 - 100)
Lamp	13	84.6	(54.6 - 98.1)	14	100.0	(76.8 - 100)	17	94.1	(71.3 - 99.9)
Sphygmomanometer	13	84.6	(54.6 - 98.1)	14	100.0	(76.8 - 100)	17	100.0	(80.5 - 100)
Stethoscope	13	84.6	(54.6 - 98.1)	14	100.0	(76.8 - 100)	17	100.0	(80.5 - 100)
Perinatal maternal medical history form	13	100.0	(75.3 - 100)	14	92.9	(66.1 - 99.8)	17	100.0	(80.5 - 100)
Glycemia test	-	-	-	11	90.9	(58.7 - 99.8)	17	52.9	(27.8 - 77)
All ANC equipment observed and functioning	13	38.5	(13.9 - 68.4)	14	57.1	(28.9 - 82.3)	17	82.4	(56.6 - 96.2)

* Glycemia test not captured for basic facilities at baseline.

Table 6.6: Antenatal/postnatal care equipment observed and functional, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Scale with measuring rod	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	100	(29.2 - 100)
Gynecological exam table	4	75	(19.4 - 99.4)	4	100	(39.8 - 100)	3	100	(29.2 - 100)
CLAP obstetric tape / measuring tape	4	75	(19.4 - 99.4)	4	75	(19.4 - 99.4)	3	100	(29.2 - 100)
Lamp	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	100	(29.2 - 100)
Sphygmomanometer	4	75	(19.4 - 99.4)	4	100	(39.8 - 100)	3	100	(29.2 - 100)
Stethoscope	4	75	(19.4 - 99.4)	4	75	(19.4 - 99.4)	3	100	(29.2 - 100)
Perinatal maternal medical history form	4	75	(19.4 - 99.4)	4	100	(39.8 - 100)	3	100	(29.2 - 100)
Perinatal maternal card	4	50	(6.8 - 93.2)	4	100	(39.8 - 100)	3	100	(29.2 - 100)
All ANC equipment observed and functioning	4	50	(6.8 - 93.2)	4	50	(6.8 - 93.2)	3	100	(29.2 - 100)

6.3 ANC and PNC pharmacy inputs

During the observation component of the survey, interviewers evaluated the presence and stock of pharmacy inputs related to antenatal and postpartum care. The standards for ANC/PNC pharmacy inputs are determined by the SMI composite monitoring indicator (7020). Interviewers were instructed to observe each drug and review any kardex or written documentation for stock-out in the last three months. If the facility did not have three-month stock documentation at the second follow-up, the facility was considered to be stocked out of the drug and did not pass that portion of the indicator.

Table 6.7: Antenatal/postnatal care pharmacy inputs, ambulatory intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Multivitamin / (iron + folic acid)	47	83.0	(69.2 - 92.4)	38	92.1	(78.6 - 98.3)	40	32.5	(18.6 - 49.1)
Tetanus vaccine (if vaccines stored)	23	95.7	(78.1 - 99.9)	29	86.2	(68.3 - 96.1)	35	94.3	(80.8 - 99.3)
All ANC drugs observed day of survey	47	80.9	(66.7 - 90.9)	38	84.2	(68.7 - 94)	40	32.5	(18.6 - 49.1)
All ANC drugs continuously available in past three months	47	74.5	(59.7 - 86.1)	38	50.0	(33.4 - 66.6)	40	22.5	(10.8 - 38.5)

Table 6.8: Antenatal/postnatal care pharmacy inputs, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Multivitamin / (iron + folic acid)	13	100.0	(75.3 - 100)	14	100.0	(76.8 - 100)	17	47.1	(23 - 72.2)
Tetanus vaccine (if vaccines stored)	10	90.0	(55.5 - 99.7)	13	92.3	(64 - 99.8)	17	88.2	(63.6 - 98.5)
All ANC drugs observed day of survey	13	92.3	(64 - 99.8)	14	92.9	(66.1 - 99.8)	17	35.3	(14.2 - 61.7)
All ANC drugs continuously available in past three months	13	69.2	(38.6 - 90.9)	14	57.1	(28.9 - 82.3)	17	23.5	(6.8 - 49.9)

Table 6.9: Antenatal/postnatal care pharmacy inputs, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Multivitamin / (iron + folic acid)	4	75	(19.4 - 99.4)	4	100	(39.8 - 100)	3	66.7	(9.4 - 99.2)
Tetanus vaccine (if vaccines stored)	3	100	(29.2 - 100)	2	50	(1.3 - 98.7)	2	100.0	(15.8 - 100)
All ANC drugs observed day of survey	4	75	(19.4 - 99.4)	4	75	(19.4 - 99.4)	3	66.7	(9.4 - 99.2)
All ANC drugs continuously available in past three months	4	50	(6.8 - 93.2)	4	75	(19.4 - 99.4)	3	33.3	(0.8 - 90.6)

6.4 ANC and PNC laboratory inputs

At hospitals, surveyors also observed availability and functionality of laboratory inputs necessary for appropriate ANC and PNC as determined by the SMI composite monitoring indicator (7020).

Table 6.10: Antenatal/postnatal care lab inputs, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Hematological equipment	6	0	(0 - 45.9)	11	63.6	(30.8 - 89.1)	11	27.3	(6 - 61)
Blood chemistry equipment + reagents / glucometer + reagents	-	-	-	11	100.0	(71.5 - 100)	11	72.7	(39 - 94)
Sharps disposal	-	-	-	11	100.0	(71.5 - 100)	11	100.0	(71.5 - 100)
All lab inputs observed	4	0	(0 - 60.2)	10	60.0	(26.2 - 87.8)	11	27.3	(6 - 61)

* Blood chemistry/glucometer and reagents, sharps disposal data not available at baseline.

Table 6.11: Antenatal/postnatal care lab inputs, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Hematological equipment	-	-	-	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)
Blood chemistry equipment	-	-	-	4	75	(19.4 - 99.4)	3	100.0	(29.2 - 100)
Blood chemistry reagents	-	-	-	-	-	-	3	66.7	(9.4 - 99.2)
Prothrombine and thromboplastin tests	-	-	-	4	50	(6.8 - 93.2)	3	66.7	(9.4 - 99.2)
PTT and TPT reagents	-	-	-	-	-	-	3	66.7	(9.4 - 99.2)
Syphilis test	-	-	-	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)
HIV test	-	-	-	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)
All lab inputs observed	-	-	-	-	-	-	3	66.7	(9.4 - 99.2)

* Blood chemistry reagents and PTT, TPT reagents data not available at baseline or first follow-up.

6.5 ANC/PNC composite indicator

The tables below display performance on the SMI composite monitoring indicator for antenatal and postpartum care (7020). This indicator is evaluated at all facilities that provide antenatal or postnatal care.

Table 6.12: Antenatal/postnatal care composite indicators, ambulatory intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
All equipment observed and functional	47	19.1	(9.1 - 33.3)	38	42.1	(26.3 - 59.2)	40	85.0	(70.2 - 94.3)
All drugs observed on the day of survey	47	80.9	(66.7 - 90.9)	38	84.2	(68.7 - 94)	40	32.5	(18.6 - 49.1)
All drugs continuously available in prior three months	47	74.5	(59.7 - 86.1)	38	50.0	(33.4 - 66.6)	40	22.5	(10.8 - 38.5)
Antenatal care provided according to SMI standards	47	12.8	(4.8 - 25.7)	38	10.5	(2.9 - 24.8)	40	22.5	(10.8 - 38.5)

Table 6.13: Antenatal/postnatal care composite indicators, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
All equipment observed and functional	13	38.5	(13.9 - 68.4)	14	57.1	(28.9 - 82.3)	17	82.4	(56.6 - 96.2)
All drugs observed on the day of survey	13	92.3	(64 - 99.8)	14	92.9	(66.1 - 99.8)	17	35.3	(14.2 - 61.7)
All drugs continuously available in prior three months	13	69.2	(38.6 - 90.9)	14	57.1	(28.9 - 82.3)	17	23.5	(6.8 - 49.9)
All lab inputs observed day of survey	4	0.0	(0 - 60.2)	10	60.0	(26.2 - 87.8)	11	27.3	(6 - 61)
Antenatal care provided according to SMI standards	13	15.4	(1.9 - 45.4)	14	28.6	(8.4 - 58.1)	17	11.8	(1.5 - 36.4)

Table 6.14: Antenatal/postnatal care composite indicators, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
All equipment observed and functional	4	50	(6.8 - 93.2)	4	50	(6.8 - 93.2)	3	100.0	(29.2 - 100)
All drugs observed on the day of survey	4	75	(19.4 - 99.4)	4	75	(19.4 - 99.4)	3	66.7	(9.4 - 99.2)
All drugs continuously available in prior three months	4	50	(6.8 - 93.2)	4	75	(19.4 - 99.4)	3	33.3	(0.8 - 90.6)
All lab inputs observed day of survey	-	-	-	-	-	-	3	66.7	(9.4 - 99.2)
Antenatal care provided according to SMI standards	4	25	(0.6 - 80.6)	4	25	(0.6 - 80.6)	3	33.3	(0.8 - 90.6)

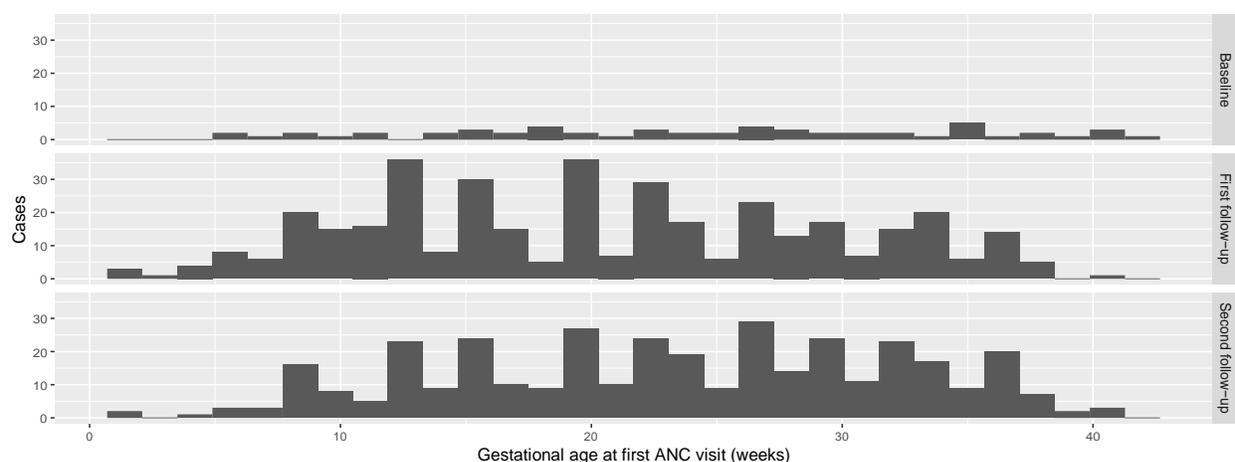
6.6 Medical record review: timely first antenatal care visit

Doctors and nurses systematically selected and reviewed antenatal care (ANC) records from ambulatory facilities for women who delivered in the last two years. Records were evaluated on the timeliness of the first ANC visit according to gestational age. As defined the SMI monitoring indicator (3040), the first antenatal care visit should occur at or within twelve weeks of gestation. Gestational age at first visit was reported at the first and second follow-up evaluations and calculated at the baseline evaluation.

Table 6.15: Timely first ANC visit, ambulatory intervention facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
First ANC visit within 12 weeks	56	14.3	(6.4 - 26.2)	383	24.5	(20.3 - 29.2)	361	13.3	(10 - 17.2)

Figure 6.1: Histogram comparison of first ANC visit, by collection period



6.7 Medical Record Review: four antenatal care visits according to SMI standard

Doctors and nurses systematically selected and reviewed antenatal care (ANC) records from ambulatory facilities for women who delivered in the last two years. According to the SMI monitoring indicator (3030), which determines the standards for antenatal care, women should receive at least four antenatal care visits with appropriate check ups (weight + blood pressure at each visit, fetal heart rate + fetal movement if gestational age is > 20 weeks, uterine height if gestational age is > 20 weeks), and should receive each standard lab test at least once during the pregnancy. The tables below display the percentage of medical records for which the standards for antenatal care were met.

Table 6.16: At least four antenatal care visits to standard, ambulatory intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
At least four ANC visits	58	12.1	(5 - 23.3)	383	25.1	(20.8 - 29.7)	401	6.7	(4.5 - 9.6)
All appropriate checks performed, at least four ANC visits	58	1.7	(0 - 9.2)	383	14.9	(11.5 - 18.8)	401	3.0	(1.6 - 5.2)
All lab tests performed at least once during pregnancy:	58	0.0	(0 - 6.2)	383	54.3	(49.2 - 59.4)	401	0.5	(0.1 - 1.8)
Blood group	58	0.0	(0 - 6.2)	383	59.0	(53.9 - 64)	401	3.0	(1.6 - 5.2)
Rh factor	58	0.0	(0 - 6.2)	383	55.1	(50 - 60.1)	401	3.0	(1.6 - 5.2)
Blood glucose	58	1.7	(0 - 9.2)	383	62.7	(57.6 - 67.5)	401	4.2	(2.5 - 6.7)
HIV test	58	1.7	(0 - 9.2)	383	63.4	(58.4 - 68.3)	401	4.2	(2.5 - 6.7)
Hemoglobin	58	1.7	(0 - 9.2)	383	61.6	(56.5 - 66.5)	401	3.0	(1.6 - 5.2)
Urinalysis	58	3.4	(0.4 - 11.9)	383	62.4	(57.3 - 67.3)	401	2.2	(1 - 4.2)
Antenatal care performed according to standard	58	0.0	(0 - 6.2)	383	10.4	(7.6 - 13.9)	401	0.0	(0 - 0.9)

* At the baseline, fetal checks and fundal height were captured only if gestational age at the first visit was eligible.

6.8 Medical record review: Partograph revision

Doctors and nurses systematically selected and reviewed uncomplicated delivery records from basic and complete hospitals in the past two years. During this review, delivery records were evaluated for partograph completion. Standards for the partograph are determined by the SMI monitoring indicator (4060). Partograph data from the baseline evaluation does not apply to this indicator. Cases of elective C-section or imminent birth are excluded in those cases where a partograph was not included and filed out.

Figure 6.2: Partograph completion at the second follow-up evaluation

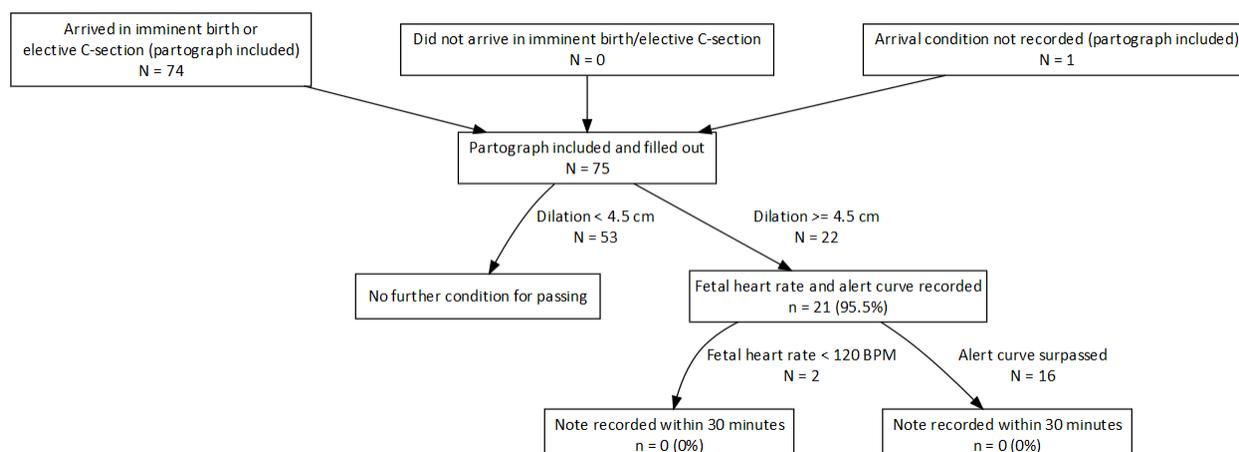


Table 6.17: Partograph revision, basic intervention facilities

	Second Follow-Up		
	N	%	CI
Patient arrived in imminent birth or elective C-section (no partograph included)	16	25	(7.3 - 52.4)
Partograph included and filled out (regardless of delivery type)	12	100	(73.5 - 100)
If partograph filled out:			
Fetal heart rate and alert curve recorded (if dilation > 4.5 cm)	12	100	(73.5 - 100)
Note written within 30 minutes if fetal heart rate < 120 bpm	-	-	-
Note written within 30 minutes if alert curve surpassed	12	0	(0 - 26.5)
Partograph filled according to standard	16	25	(7.3 - 52.4)

Table 6.18: Partograph revision, complete intervention facilities

	First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI
Patient arrived in imminent birth or elective C-section (no partograph included)	88	2.3	(0.3 - 8)	64	1.6	(0 - 8.4)
Partograph included and filled out (regardless of delivery type)	86	89.5	(81.1 - 95.1)	63	100.0	(94.3 - 100)
If partograph filled out:						
Fetal heart rate and alert curve recorded (if dilation > 4.5 cm)	46	93.5	(82.1 - 98.6)	10	90.0	(55.5 - 99.7)
Note written within 30 minutes if fetal heart rate < 120 bpm	3	0.0	(0 - 70.8)	2	0.0	(0 - 84.2)
Note written within 30 minutes if alert curve surpassed	11	9.1	(0.2 - 41.3)	4	0.0	(0 - 60.2)
Partograph filled according to standard	88	73.9	(63.4 - 82.7)	64	93.8	(84.8 - 98.3)

6.9 Medical record review: Delivery management

The SMI performance indicator 4660 evaluates medical records at CAP and CAIMI facilities for appropriate management of deliveries in the past year. Appropriate delivery management is achieved if the birth was attended by a doctor, nurse, obstetrician, or midwife, if oxytocin or another uterotonic was administered, if the partograph was included in the medical file, and if cord clamping occurred between two and three minutes after birth. In previous rounds, cord clamping was required at 90 seconds. This table reflects updated requirements.

Table 6.19: Delivery management, CAP and CAIMI intervention facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Attended by doctor/nurse/obstetrician/midwife	68	91.2	(81.8 - 96.7)	127	95.3	(90 - 98.2)	148	97.3	(93.2 - 99.3)
Oxytocin or other uterotonic administered	68	91.2	(81.8 - 96.7)	127	96.9	(92.1 - 99.1)	148	99.3	(96.3 - 100)
Partograph included in file	68	69.1	(56.7 - 79.8)	127	91.3	(85 - 95.6)	148	100.0	(97.5 - 100)
Cord clamping for appropriate time	68	83.8	(72.9 - 91.6)	127	59.8	(50.8 - 68.4)	148	100.0	(97.5 - 100)
Delivery managed to standard	68	50.0	(37.6 - 62.4)	127	50.4	(41.4 - 59.4)	148	96.6	(92.3 - 98.9)

* At baseline and first follow-up, cord clamping time was defined at 90 seconds. At the second follow-up, it is between 2-3 minutes.

6.10 Medical record review: immediate maternal postpartum care

Doctors and nurses reviewed immediate postpartum records from uncomplicated deliveries in the past two years at basic and complete facilities. Standards for immediate postpartum care are determined by the SMI performance indicator (4050). Delivery patients must have all appropriate checks performed four times in the first hour after deliver, twice in the second hour, and once at discharge.

Table 6.13: Antenatal/postnatal care composite indicators, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Checked 4 times in first hour, twice in second hour, once at discharge:									
Blood pressure	127	18.1	(11.8 - 25.9)	181	42.5	(35.2 - 50.1)	150	46.7	(38.5 - 55)
Temperature	127	15.7	(9.9 - 23.3)	181	41.4	(34.2 - 49)	150	38.0	(30.2 - 46.3)
Heart rate / pulse	127	15.0	(9.3 - 22.4)	181	42.0	(34.7 - 49.5)	150	44.7	(36.6 - 53)
Postpartum care to standard	127	14.2	(8.6 - 21.5)	181	41.4	(34.2 - 49)	150	35.3	(27.7 - 43.5)

* Heart rate not captured as an alternative to pulse at baseline and first follow-up.

Table 6.14: Antenatal/postnatal care composite indicators, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Checked 4 times in first hour, twice in second hour, once at discharge:									
Blood pressure	34	8.8	(1.9 - 23.7)	85	36.5	(26.3 - 47.6)	60	48.3	(35.2 - 61.6)
Temperature	34	8.8	(1.9 - 23.7)	85	36.5	(26.3 - 47.6)	60	41.7	(29.1 - 55.1)
Heart rate / pulse	34	8.8	(1.9 - 23.7)	85	36.5	(26.3 - 47.6)	60	41.7	(29.1 - 55.1)
Postpartum care to standard	34	8.8	(1.9 - 23.7)	85	36.5	(26.3 - 47.6)	60	41.7	(29.1 - 55.1)

* Heart rate not captured as an alternative to pulse at baseline and first follow-up.

7 Chapter 7: Maternal and neonatal health: complications

7.1 Emergency obstetric and neonatal care service provision

This chapter summarizes key aspects of management of maternal and neonatal complications at basic and complete facilities. The following tables display the type of setting in which emergency care takes place among facilities that provide delivery services.

Table 7.1: Emergency care services provision, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Emergency care area									
Visual and auditory privacy	13	53.8	(25.1 - 80.8)	15	66.7	(38.4 - 88.2)	17	94.1	(71.3 - 99.9)
Visual privacy only	13	30.8	(9.1 - 61.4)	15	0.0	(0 - 21.8)	17	5.9	(0.1 - 28.7)
Non private area	13	15.4	(1.9 - 45.4)	15	0.0	(0 - 21.8)	17	0.0	(0 - 19.5)
Other	13	0.0	(0 - 24.7)	15	0.0	(0 - 21.8)	17	0.0	(0 - 19.5)
Do not provide service	13	0.0	(0 - 24.7)	15	33.3	(11.8 - 61.6)	17	0.0	(0 - 19.5)

Table 7.2: Emergency care services provision, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Emergency care area									
Visual and auditory privacy	4	0	(0 - 60.2)	4	75	(19.4 - 99.4)	3	100	(29.2 - 100)
Visual privacy only	4	50	(6.8 - 93.2)	4	0	(0 - 60.2)	3	0	(0 - 70.8)
Non private area	4	50	(6.8 - 93.2)	4	0	(0 - 60.2)	3	0	(0 - 70.8)
Other	4	0	(0 - 60.2)	4	0	(0 - 60.2)	3	0	(0 - 70.8)
Do not provide service	4	0	(0 - 60.2)	4	25	(0.6 - 80.6)	3	0	(0 - 70.8)

7.2 Emergency care composite indicator: equipment

Specific equipment and drugs are necessary for emergency care in basic and complete facilities, as defined by the monitoring indicator for emergency care (7030). The equipment included in this indicator can be found in Tables 7.3 and 7.4 below. All equipment was observed by data collectors during the observation survey. Interviewers were instructed to observe and test for functionality (if possible) and, unless otherwise noted, the facility only needs to have at least one functioning piece of equipment on the day of the survey. The drugs included in this indicator can be found in the next section.

Table 7.3: Emergency care equipment, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Blood pressure apparatus	13	76.9	(46.2 - 95)	9	77.8	(40 - 97.2)	17	94.1	(71.3 - 99.9)
Stethoscope	13	92.3	(64 - 99.8)	9	77.8	(40 - 97.2)	17	88.2	(63.6 - 98.5)
Pinard stethoscope / portable doppler	13	84.6	(54.6 - 98.1)	9	88.9	(51.8 - 99.7)	17	100.0	(80.5 - 100)
Heat sterilizer / autoclave	13	69.2	(38.6 - 90.9)	8	87.5	(47.3 - 99.7)	17	70.6	(44 - 89.7)
Oxygen tank	13	53.8	(25.1 - 80.8)	9	88.9	(51.8 - 99.7)	17	88.2	(63.6 - 98.5)
Adult resuscitation bag	13	61.5	(31.6 - 86.1)	9	100.0	(66.4 - 100)	17	100.0	(80.5 - 100)
Neonate resuscitation bag	13	46.2	(19.2 - 74.9)	9	88.9	(51.8 - 99.7)	17	100.0	(80.5 - 100)
Laryngoscope	13	23.1	(5 - 53.8)	9	66.7	(29.9 - 92.5)	17	82.4	(56.6 - 96.2)
Manual vacuum aspiration (not required at CAPs)	13	7.7	(0.2 - 36)	9	55.6	(21.2 - 86.3)	17	70.6	(44 - 89.7)
All emergency equipment observed and functional	13	15.4	(1.9 - 45.4)	9	22.2	(2.8 - 60)	17	47.1	(23 - 72.2)

* Data on heat sterilizer/autoclave not captured at one facility in the first follow-up. This piece of equipment was excluded for this facility in the final indication calculation.

Table 7.4: Emergency care equipment, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Blood pressure apparatus	4	25	(0.6 - 80.6)	3	100.0	(29.2 - 100)	3	100	(29.2 - 100)
Stethoscope	4	0	(0 - 60.2)	3	100.0	(29.2 - 100)	3	100	(29.2 - 100)
Pinard stethoscope / portable doppler	4	100	(39.8 - 100)	3	66.7	(9.4 - 99.2)	3	100	(29.2 - 100)
Heat sterilizer / autoclave	4	75	(19.4 - 99.4)	3	100.0	(29.2 - 100)	3	100	(29.2 - 100)
Oxygen tank	4	75	(19.4 - 99.4)	3	100.0	(29.2 - 100)	3	100	(29.2 - 100)
Adult resuscitation bag	4	75	(19.4 - 99.4)	3	100.0	(29.2 - 100)	3	100	(29.2 - 100)
Neonate resuscitation bag	4	75	(19.4 - 99.4)	3	100.0	(29.2 - 100)	3	100	(29.2 - 100)
Laryngoscope	4	50	(6.8 - 93.2)	3	100.0	(29.2 - 100)	3	100	(29.2 - 100)
MVA / uterine curettage kit	4	75	(19.4 - 99.4)	3	66.7	(9.4 - 99.2)	3	100	(29.2 - 100)
Anesthesia equipment	4	25	(0.6 - 80.6)	3	66.7	(9.4 - 99.2)	3	100	(29.2 - 100)
C-section equipment	4	50	(6.8 - 93.2)	3	66.7	(9.4 - 99.2)	3	100	(29.2 - 100)
Pediatric / neonatal stethoscope	4	25	(0.6 - 80.6)	3	66.7	(9.4 - 99.2)	3	100	(29.2 - 100)
All emergency equipment observed and functional	4	0	(0 - 60.2)	3	33.3	(0.8 - 90.6)	3	100	(29.2 - 100)

7.3 Emergency care composite indicator: pharmacy inputs

The SMI composite monitoring indicator (7030) also evaluates whether key drugs and supplements necessary for emergency care are observed on the day of the survey and in continuous supply for the past three months at hospitals which indicate that they provide maternal and neonatal emergency care services.

Table 7.5: Emergency care pharmacy inputs, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Oxytocin / methyletergonovine	13	84.6	(54.6 - 98.1)	9	100.0	(66.4 - 100)	17	100.0	(80.5 - 100)
Gentamicin / amikacin	13	69.2	(38.6 - 90.9)	9	88.9	(51.8 - 99.7)	17	100.0	(80.5 - 100)
Dexamethasone / betamethasone	13	76.9	(46.2 - 95)	9	77.8	(40 - 97.2)	17	100.0	(80.5 - 100)
Metronidazole / clindamycin	13	84.6	(54.6 - 98.1)	9	77.8	(40 - 97.2)	17	100.0	(80.5 - 100)
Magnesium sulfate	13	84.6	(54.6 - 98.1)	9	100.0	(66.4 - 100)	17	100.0	(80.5 - 100)
Calcium gluconate	13	30.8	(9.1 - 61.4)	9	55.6	(21.2 - 86.3)	17	82.4	(56.6 - 96.2)
Hydralazine	13	23.1	(5 - 53.8)	9	77.8	(40 - 97.2)	17	52.9	(27.8 - 77)
Ampicillin / penicillin	13	84.6	(54.6 - 98.1)	9	100.0	(66.4 - 100)	17	100.0	(80.5 - 100)
All drugs observed day of evaluation	13	0.0	(0 - 24.7)	9	22.2	(2.8 - 60)	17	47.1	(23 - 72.2)
All drugs continuously available in past 3 months	13	0.0	(0 - 24.7)	9	11.1	(0.3 - 48.2)	17	17.6	(3.8 - 43.4)

* Stockout data not available for metronidazole, clindamycin, or calcium gluconate at baseline evaluation.

Table 7.6: Emergency care pharmacy inputs, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Oxytocin/methyletergonovine	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Gentamicin / amikacin	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Dexamethasone/betamethasone	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Metronidazole/clindamycin	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Magnesium sulfate	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Calcium gluconate	4	75	(19.4 - 99.4)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Hydralazine hydrochloride	4	75	(19.4 - 99.4)	3	100.0	(29.2 - 100)	3	33.3	(0.8 - 90.6)
Ampicillin / crystal benzylpenicillin / penicillin / chloramphenicol	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Ceftriaxone	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Nifedipine	4	25	(0.6 - 80.6)	3	33.3	(0.8 - 90.6)	3	100.0	(29.2 - 100)
Diazepam	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)	3	66.7	(9.4 - 99.2)
Diphenhydramine	4	50	(6.8 - 93.2)	3	33.3	(0.8 - 90.6)	3	100.0	(29.2 - 100)
All drugs observed day of evaluation	4	0	(0 - 60.2)	3	33.3	(0.8 - 90.6)	3	33.3	(0.8 - 90.6)
All drugs continuously available in past 3 months	4	0	(0 - 60.2)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)

* Stockout data not available for metronidazole, clindamycin, calcium gluconate, hydralazine hydrochloride, ceftriaxone, nifedipine, and diphenhydramine at baseline evaluation.

† Stockout data not available for hydralazine hydrochloride at first follow-up evaluation.

7.4 Emergency care composite indicator

The table below displays composite performance on the SMI emergency care monitoring indicator (7030) in hospitals which provide emergency care services.

Table 7.7: Emergency care composite indicator, basic intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
All equipment observed and functional	13	15.4	(1.9 - 45.4)	9	22.2	(2.8 - 60)	17	47.1	(23 - 72.2)
All drugs observed on the day of survey	13	0.0	(0 - 24.7)	9	22.2	(2.8 - 60)	17	47.1	(23 - 72.2)
All drugs continuously available in prior three months	13	0.0	(0 - 24.7)	9	11.1	(0.3 - 48.2)	17	17.6	(3.8 - 43.4)
Emergency care provided according to SMI standards	13	0.0	(0 - 24.7)	9	11.1	(0.3 - 48.2)	17	5.9	(0.1 - 28.7)

Table 7.8: Emergency care composite indicator, complete intervention facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
All equipment observed and functional	4	0	(0 - 60.2)	3	33.3	(0.8 - 90.6)	3	100.0	(29.2 - 100)
All drugs observed on the day of survey	4	0	(0 - 60.2)	3	33.3	(0.8 - 90.6)	3	33.3	(0.8 - 90.6)
All drugs continuously available in prior three months	4	0	(0 - 60.2)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)
Emergency care provided according to SMI standards	4	0	(0 - 60.2)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)

7.5 Uterine balloon availability

During the questionnaire component of the survey, representatives of facilities which provide delivery services were asked about the availability and staff training in the use of uterine tamponade balloons, a method of obstetric hemorrhage management.

Table 7.9: Uterine tamponade balloon for hemorrhage management, second follow-up evaluation

	Basic Facilities			Complete Facilities		
	N	%	CI	N	%	CI
Facility uses tamponade to manage obstetric hemorrhage	16	56.2	(29.9 - 80.2)	3	100.0	(29.2 - 100)
Type						
Bakri	9	11.1	(0.3 - 48.2)	3	0.0	(0 - 70.8)
Foley catheter	9	44.4	(13.7 - 78.8)	3	33.3	(0.8 - 90.6)
Condom-based balloon	9	11.1	(0.3 - 48.2)	3	33.3	(0.8 - 90.6)
None of these	9	11.1	(0.3 - 48.2)	3	0.0	(0 - 70.8)
Do not know/did not respond	9	22.2	(2.8 - 60)	3	33.3	(0.8 - 90.6)
Assembly kit						
Facility has tamponade kit	9	44.4	(13.7 - 78.8)	3	66.7	(9.4 - 99.2)
Kit commercially assembled	4	25.0	(0.6 - 80.6)	2	50.0	(1.3 - 98.7)
Kit prepared from available materials	4	50.0	(6.8 - 93.2)	2	0.0	(0 - 84.2)
Do not know / did not respond (kit type)	4	25.0	(0.6 - 80.6)	2	50.0	(1.3 - 98.7)
Staff training						
Staff trained in tamponade use	17	82.4	(56.6 - 96.2)	3	100.0	(29.2 - 100)
Staff trained in tamponade assembly	16	87.5	(61.7 - 98.4)	3	100.0	(29.2 - 100)

* Uterine balloon data not captured at baseline and first follow-up evaluations.

† One basic facility responded 'do not know' to tamponade use and was omitted.

‡ One basic facility responded 'do not know' to staff trained in assembly and was omitted.

7.6 Distribution of obstetric and neonatal complications

During medical record review, surveyors systematically selected records from deliveries in the past two years for which complications arose. Specifically, maternal records were reviewed for cases of sepsis, hemorrhage, pre-eclampsia, and eclampsia, while neonate records were reviewed for cases of low birth weight, prematurity, sepsis, and asphyxia.

Table 7.10: Distribution of obstetric complications, basic facilities

	Baseline	Second Follow-up
Sepsis	0	2
Hemorrhage	16	49
Pre-eclampsia	25	46
Eclampsia	2	3

Table 7.11: Distribution of obstetric complications, complete facilities

	Baseline	Second Follow-up
Sepsis	5	2
Hemorrhage	53	51
Pre-eclampsia	29	18
Eclampsia	8	8

Table 7.12: Distribution of neonatal complications, basic facilities

	Baseline	Second Follow-up
Sepsis	27	37
Low birth weight	7	33
Asphyxia	7	12
Prematurity	0	13

Table 7.13: Distribution of neonatal complications, complete facilities

	Baseline	Second Follow-up
Sepsis	26	25
Low birth weight	24	37
Asphyxia	20	5
Prematurity	20	40

7.7 Obstetric complications management: sepsis

During the medical record review, doctors and nurses systematically evaluated records from the past two years which met the criteria for sepsis according to the SMI standards. The obstetric complications indicator determines the standard treatment for each cause of sepsis, as well as the management protocol based on facility EONC level. Sepsis management is defined as follows:

1. The woman must have the following vital signs checked (*basic and complete facilities*):
 - Pulse / heart rate
 - Blood pressure
 - Temperature
2. The woman must have received the following laboratory tests (*complete facilities only*):
 - Complete blood test (or hemoglobin + hematocrit + platelets + leukocyte)
3. If applicable, the woman must also have received appropriate care for any of the sepsis cause scenarios detailed in the SMI maternal complications indicator:
 - If pelvic abscess: antibiotic administration + laparotomy or drainage or hysterectomy or surgical repair or (if basic) referred to complete facility

- If retained product: antibiotic administration + instrumental curettage or manual vacuum aspiration or laparotomy or hysterectomy or (if basic) referred to complete facility
- If puerperal fever: antibiotic administration + (if basic) referred to complete facility
- If postpartum endometritis: antibiotic administration + (if basic) referred to complete facility

Table 7.14: Obstetric sepsis management, basic facilities

	Second Follow-Up		
	N	%	CI
Vital signs	3	100.0	(29.2 - 100)
Pulse / heart rate	3	100.0	(29.2 - 100)
Blood pressure	3	100.0	(29.2 - 100)
Temperature	3	100.0	(29.2 - 100)
Appropriate treatment:	2	50.0	(1.3 - 98.7)
Pelvic abscess	-	-	-
Endometritis	1	0.0	(0 - 97.5)
Puerperal fever	-	-	-
Placental retention	1	100.0	(2.5 - 100)
Sepsis management to standard	3	66.7	(9.4 - 99.2)

Table 7.15: Obstetric sepsis management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs	5	100	(47.8 - 100)	2	100	(15.8 - 100)
Pulse / heart rate	5	100	(47.8 - 100)	2	100	(15.8 - 100)
Blood pressure	5	100	(47.8 - 100)	2	100	(15.8 - 100)
Temperature	5	100	(47.8 - 100)	2	100	(15.8 - 100)
Complete blood count	5	40	(5.3 - 85.3)	2	50	(1.3 - 98.7)
Appropriate treatment:	3	100	(29.2 - 100)	-	-	-
Pelvic abscess	-	-	-	-	-	-
Endometritis	1	100	(2.5 - 100)	-	-	-
Puerperal fever	-	-	-	-	-	-
Placental retention	2	100	(15.8 - 100)	-	-	-
Sepsis management to standard	5	40	(5.3 - 85.3)	2	50	(1.3 - 98.7)

7.8 Obstetric complications management: hemorrhage

During the medical record review, doctors and nurses systematically evaluated records from the past two years which met the criteria for hemorrhagic complication according to the SMI standards. The obstetric

complications indicator determines the standard treatment for each cause of hemorrhage, as well as the management protocol based on facility EONC level. Hemorrhage management is defined as follows:

1. The woman must have the following vital signs checked (*basic and complete facilities*):
 - Pulse/ heart rate
 - Blood pressure
2. The woman must have the following laboratory tests (*complete facilities only*):
 - Hematocrit
 - Hemoglobin
 - Platelet count
3. The woman must be administered at least one of the following medications (*basic and complete facilities*):
 - Ringer's lactate / Hartmann's solution / saline solution
4. If applicable, the woman must also have received appropriate care for any of the hemorrhage cause scenarios detailed in the SMI complications indicator:
 - If hemorrhage following incomplete or complete abortion: MVA or instrumental curettage or (if basic) referred to complete facility
 - If ectopic pregnancy: laparotomy or salpingectomy or surgical repair or hysterectomy or (if basic) referred to complete facility
 - If placenta previa with hemorrhage: C-section or (if basic) referred to complete facility
 - If placental abruption: Vaginal birth or C-section or (if basic) referred to complete facility
 - If uterine rupture: laparotomy or surgical repair or hysterectomy or (if basic) referred to complete facility
 - If uterine atony: uterotonics + bimanual compression or uterine massage or aortic compression or uterine tamponade (hydrostatic balloon) or compressive suture or hysterectomy or (if basic) referred to complete facility
 - If placental retention or placental remains or placental accretion: uterotonics + manual extraction or curettage or laparotomy or hysterectomy or (if basic) referred to complete facility
 - If uterine inversion: uterotonics + repositioning of the uterus with anesthesia or sedation (nonsurgical procedures or surgical procedures) or (if basic) referred to complete facility

Table 7.16: Obstetric hemorrhage management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs	16	81.2	(54.4 - 96)	49	77.6	(63.4 - 88.2)
Pulse / heart rate	16	100.0	(79.4 - 100)	49	79.6	(65.7 - 89.8)
Blood pressure	16	81.2	(54.4 - 96)	49	83.7	(70.3 - 92.7)
Ringers/Hartman/saline	16	62.5	(35.4 - 84.8)	49	93.9	(83.1 - 98.7)
Appropriate treatment:	10	80.0	(44.4 - 97.5)	43	69.8	(53.9 - 82.8)
Abortion	3	100.0	(29.2 - 100)	-	-	-
Ectopic pregnancy	-	-	-	-	-	-
Placenta previa	-	-	-	-	-	-
Placental detachment	-	-	-	-	-	-
Uterine atony	1	100.0	(2.5 - 100)	5	80.0	(28.4 - 99.5)
Uterine rupture	1	100.0	(2.5 - 100)	-	-	-
Uterine inversion	1	0.0	(0 - 97.5)	1	100.0	(2.5 - 100)
Placental retention	-	-	-	-	-	-
Retention of placental remains	4	75.0	(19.4 - 99.4)	37	67.6	(50.2 - 82)
Hemorrhage management to standard	16	43.8	(19.8 - 70.1)	49	51.0	(36.3 - 65.6)

Table 7.17: Obstetric hemorrhage management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs	53	75.5	(61.7 - 86.2)	51	90.2	(78.6 - 96.7)
Pulse / heart rate	53	88.7	(77 - 95.7)	51	100.0	(93 - 100)
Blood pressure	53	84.9	(72.4 - 93.3)	51	90.2	(78.6 - 96.7)
Lab tests	53	81.1	(68 - 90.6)	51	96.1	(86.5 - 99.5)
Hematocrit	53	84.9	(72.4 - 93.3)	51	100.0	(93 - 100)
Hemoglobin	53	86.8	(74.7 - 94.5)	51	100.0	(93 - 100)
Platelette count	53	81.1	(68 - 90.6)	51	96.1	(86.5 - 99.5)
Ringers/Hartman/saline	53	100.0	(93.3 - 100)	51	88.2	(76.1 - 95.6)
Appropriate treatment:	53	32.1	(19.9 - 46.3)	51	33.3	(20.8 - 47.9)
Abortion	8	87.5	(47.3 - 99.7)	4	75.0	(19.4 - 99.4)
Ectopic pregnancy	-	-	-	1	0.0	(0 - 97.5)
Placenta previa	1	0.0	(0 - 97.5)	-	-	-
Placental detachment	-	-	-	-	-	-
Uterine atony	3	0.0	(0 - 70.8)	2	50.0	(1.3 - 98.7)
Uterine rupture	-	-	-	-	-	-
Uterine inversion	2	0.0	(0 - 84.2)	-	-	-
Placental retention	2	50.0	(1.3 - 98.7)	3	33.3	(0.8 - 90.6)
Retention of placental remains	45	33.3	(20 - 49)	42	31.0	(17.6 - 47.1)
Hemorrhage management to standard	53	20.8	(10.8 - 34.1)	51	23.5	(12.8 - 37.5)

7.9 Obstetric complications management: pre-eclampsia

During the medical record review, doctors and nurses systematically evaluated records from the past two years which met the criteria for severe obstetric pre-eclampsia complication according to the SMI standards. The obstetric complications indicator determines the standard treatment as well as management protocol for pre-eclampsia cases based on facility EONC level. Pre-eclampsia management is defined as follows:

1. The woman must have the following vital signs checked:
 - Blood pressure
 - Patellar reflex (*complete facility only*)
 - Pulse / heart rate (*complete facility only*)
 - Respiratory rate (*complete facility only*)
2. The woman must have the following laboratory tests:
 - Urine protein
 - Platelet count (*complete facility only*)
 - Creatinine (*complete facility only*)
 - Uric acid (*complete facility only*)
 - Aspartate aminotransferase/ Glutamic-oxalacetic transaminase (GOT) (*complete facility only*)

- Alanine transaminase/Glutamic-pyruvic transaminase (GPT) (*complete facility only*)
 - Lactate dehydrogenase (*complete facility only*)
3. The woman was administered one of the following medications:
- Magnesium sulfate
 - Ringer's lactate /Hartmann's solution / saline solution (*basic facility only*)
 - Hydralazine / labetalol / nifedipine (if diastolic blood pressure > 110 at first checkup) (*complete facility only*)
 - Dexamethasone/Betamethasone (if gestational age 24 - 35 weeks) (*complete facility only*)
4. Woman was referred to a complete facility (*basic facility only*)

Table 7.18: Maternal pre-eclampsia management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs	25	100	(86.3 - 100)	46	100.0	(92.3 - 100)
Blood pressure	25	100	(86.3 - 100)	46	100.0	(92.3 - 100)
Lab tests	25	4	(0.1 - 20.4)	46	2.2	(0.1 - 11.5)
Urine protein	25	4	(0.1 - 20.4)	46	2.2	(0.1 - 11.5)
Medication administered	25	32	(14.9 - 53.5)	46	50.0	(34.9 - 65.1)
Magnesium sulfate	25	44	(24.4 - 65.1)	46	69.6	(54.2 - 82.3)
Ringers /Hartmann's / saline	25	36	(18 - 57.5)	46	67.4	(52 - 80.5)
Referred to complete	25	4	(0.1 - 20.4)	46	78.3	(63.6 - 89.1)
Pre-eclampsia management to standard	25	0	(0 - 13.7)	46	0.0	(0 - 7.7)

Table 7.18: Maternal pre-eclampsia management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs	29	31.0	(15.3 - 50.8)	18	38.9	(17.3 - 64.3)
Respiratory rate	29	96.6	(82.2 - 99.9)	18	94.4	(72.7 - 99.9)
Pulse / heart rate	29	100.0	(88.1 - 100)	18	100.0	(81.5 - 100)
Blood pressure	29	100.0	(88.1 - 100)	18	100.0	(81.5 - 100)
Patellar reflex	29	31.0	(15.3 - 50.8)	18	38.9	(17.3 - 64.3)
Lab tests	29	17.2	(5.8 - 35.8)	18	44.4	(21.5 - 69.2)
Urine protein	29	41.4	(23.5 - 61.1)	18	66.7	(41 - 86.7)
Platelets	29	86.2	(68.3 - 96.1)	18	83.3	(58.6 - 96.4)
Creatinine	29	93.1	(77.2 - 99.2)	18	94.4	(72.7 - 99.9)
Uric acid	29	82.8	(64.2 - 94.2)	18	88.9	(65.3 - 98.6)
Aspartate aminotransferase / glutamate oxaloacetate transaminase	29	48.3	(29.4 - 67.5)	18	83.3	(58.6 - 96.4)
Alanine aminotransferase / glutamate-pyruvate transaminase	29	44.8	(26.4 - 64.3)	18	88.9	(65.3 - 98.6)
Lactate dehydrogenase	29	72.4	(52.8 - 87.3)	18	83.3	(58.6 - 96.4)
Medication administered	29	13.8	(3.9 - 31.7)	18	5.6	(0.1 - 27.3)
Magnesium sulfate	29	69.0	(49.2 - 84.7)	18	83.3	(58.6 - 96.4)
Hydralazine / nifedipine (if sist. \geq 160 or dias. \geq 110)	-	-	-	1	0.0	(0 - 97.5)
Dexamethasone / betamethasone (if gest age 24-35 weeks)	26	11.5	(2.4 - 30.2)	16	0.0	(0 - 20.6)
Pre-eclampsia management to standard	29	0.0	(0 - 11.9)	18	0.0	(0 - 18.5)

7.10 Obstetric complications management: eclampsia

During the medical record review, doctors and nurses systematically evaluated records from the past two years which met the criteria for severe obstetric eclampsia complication according to the SMI standards. The obstetric complications indicator determines the standard treatment as well as management protocol for eclampsia cases based on facility EONC level. Eclampsia management is defined as follows:

1. The woman must have the following vital signs checked:
 - Blood pressure
 - Patellar reflex (*complete facility only*)
 - Pulse / heart rate (*complete facility only*)
 - Respiratory rate (*complete facility only*)
2. The woman must have the following laboratory tests:
 - Urine protein
 - Platelet count (*complete facility only*)
 - Creatinine (*complete facility only*)
 - Uric acid (*complete facility only*)
 - Aspartate aminotransferase/ Glutamic-oxalacetic transaminase (GOT) (*complete facility only*)
 - Alanine transaminase/Glutamic-pyruvic transaminase (GPT) (*complete facility only*)
 - Lactate dehydrogenase (*complete facility only*)
3. The woman was administered one of the following medications:
 - Magnesium sulfate
 - Ringer's lactate /Hartmann's solution / saline solution (*basic facility only*)

- Hydralazine / labetalol / nifedipine (if diastolic blood pressure > 110 at first checkup) (*complete facility only*)
 - Dexamethasone/Betamethasone (if gestational age 24 - 35 weeks) (*complete facility only*)
4. Woman was referred to a complete facility (*basic facility only*)

Table 7.19: Maternal eclampsia management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs	2	100	(15.8 - 100)	3	100.0	(29.2 - 100)
Blood pressure	2	100	(15.8 - 100)	3	100.0	(29.2 - 100)
Lab tests	2	50	(1.3 - 98.7)	3	0.0	(0 - 70.8)
Urine protein	2	50	(1.3 - 98.7)	3	0.0	(0 - 70.8)
Medication administered	2	100	(15.8 - 100)	3	66.7	(9.4 - 99.2)
Magnesium sulfate	2	100	(15.8 - 100)	3	100.0	(29.2 - 100)
Ringers /Hartmann's / saline	2	100	(15.8 - 100)	3	66.7	(9.4 - 99.2)
Referred to complete	2	0	(0 - 84.2)	3	66.7	(9.4 - 99.2)
Eclampsia management to standard	2	0	(0 - 84.2)	3	0.0	(0 - 70.8)

Table 7.20: Maternal eclampsia management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs	8	37.5	(8.5 - 75.5)	8	50.0	(15.7 - 84.3)
Respiratory rate	8	100.0	(63.1 - 100)	8	87.5	(47.3 - 99.7)
Pulse / heart rate	8	100.0	(63.1 - 100)	8	87.5	(47.3 - 99.7)
Blood pressure	8	100.0	(63.1 - 100)	8	87.5	(47.3 - 99.7)
Patellar reflex	8	37.5	(8.5 - 75.5)	8	50.0	(15.7 - 84.3)
Lab tests	8	12.5	(0.3 - 52.7)	8	50.0	(15.7 - 84.3)
Urine protein	8	37.5	(8.5 - 75.5)	8	87.5	(47.3 - 99.7)
Platelets	8	100.0	(63.1 - 100)	8	100.0	(63.1 - 100)
Creatinine	8	87.5	(47.3 - 99.7)	8	100.0	(63.1 - 100)
Uric acid	8	100.0	(63.1 - 100)	8	75.0	(34.9 - 96.8)
Aspartate aminotransferase / glutamate oxaloacetate transaminase	8	62.5	(24.5 - 91.5)	8	75.0	(34.9 - 96.8)
Alanine aminotransferase / glutamate-pyruvate transaminase	8	62.5	(24.5 - 91.5)	8	75.0	(34.9 - 96.8)
Lactate dehydrogenase	8	50.0	(15.7 - 84.3)	8	87.5	(47.3 - 99.7)
Medication administered	8	0.0	(0 - 36.9)	8	0.0	(0 - 36.9)
Magnesium sulfate	8	75.0	(34.9 - 96.8)	8	87.5	(47.3 - 99.7)
Hydralazine / nifedipine (if sist. >= 160 or dias. >= 110)	-	-	-	3	100.0	(29.2 - 100)
Dexamethasone / betamethasone (if gest age 24-35 weeks)	6	0.0	(0 - 45.9)	8	0.0	(0 - 36.9)
Eclampsia management to standard	8	0.0	(0 - 36.9)	8	0.0	(0 - 36.9)

7.11 Obstetric complications indicator performance

The table below displays the percentage of medical records reviewed for obstetric complications that indicated appropriate treatment and management according to the SMI performance indicator (4080).

Table 7.21: Obstetric complications management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Sepsis managed according to SMI standard	-	-	-	3	66.7	(9.4 - 99.2)
Hemorrhage managed according to SMI standard	16	43.8	(19.8 - 70.1)	49	51.0	(36.3 - 65.6)
Pre-eclampsia managed according to SMI standard	25	0.0	(0 - 13.7)	46	0.0	(0 - 7.7)
Eclampsia managed according to SMI standard	2	0.0	(0 - 84.2)	3	0.0	(0 - 70.8)
Complications managed according to SMI standard	43	16.3	(6.8 - 30.7)	100	26.0	(17.7 - 35.7)

Table 7.22: Obstetric complications management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Sepsis managed according to SMI standard	5	40.0	(5.3 - 85.3)	2	50.0	(1.3 - 98.7)
Hemorrhage managed according to SMI standard	53	20.8	(10.8 - 34.1)	51	23.5	(12.8 - 37.5)
Pre-eclampsia managed according to SMI standard	29	0.0	(0 - 11.9)	18	0.0	(0 - 18.5)
Eclampsia managed according to SMI standard	8	0.0	(0 - 36.9)	8	0.0	(0 - 36.9)
Complications managed according to SMI standard	95	13.7	(7.5 - 22.3)	79	16.5	(9.1 - 26.5)

7.12 Neonatal complications management: sepsis

During the medical record review, doctors and nurses systematically evaluated records from the past two years which met the criteria for neonatal sepsis complication according to the SMI standards. The neonatal complications indicator determines the standard treatment as well as the management protocol for sepsis cases based on facility EONC level. Sepsis management is defined as follows:

1. The child must have the following vital signs checked:
 - Pulse/ heart rate
 - Respiratory rate
 - Temperature
2. The child must have received the following laboratory tests (*complete facilities only*):
 - Oxygen saturation
 - Complete blood test (or hemoglobin + hematocrit + platelets + leukocyte)

- C-reactive protein
3. The child must be administered antibiotics
 4. Referral to complete facility (*basic facilities only*)
 5. Evaluated by doctor or nurse (if basic facility) or specialist (if complete facility)

Table 7.23: Neonatal sepsis management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	27	88.9	(70.8 - 97.6)	37	81.1	(64.8 - 92)
Pulse / heart rate	27	100.0	(87.2 - 100)	37	91.9	(78.1 - 98.3)
Respiratory rate	27	88.9	(70.8 - 97.6)	37	86.5	(71.2 - 95.5)
Temperature	27	100.0	(87.2 - 100)	37	97.3	(85.8 - 99.9)
Antibiotics administered	27	85.2	(66.3 - 95.8)	37	67.6	(50.2 - 82)
Evaluated by doctor or nurse	27	70.4	(49.8 - 86.2)	37	64.9	(47.5 - 79.8)
Referred to complete facility	27	0.0	(0 - 12.8)	37	35.1	(20.2 - 52.5)
Sepsis treated according to standard	27	0.0	(0 - 12.8)	37	5.4	(0.7 - 18.2)

Table 7.24: Neonatal sepsis management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	26	92.3	(74.9 - 99.1)	25	84	(63.9 - 95.5)
Pulse / heart rate	26	92.3	(74.9 - 99.1)	25	92	(74 - 99)
Respiratory rate	26	96.2	(80.4 - 99.9)	25	92	(74 - 99)
Temperature	26	96.2	(80.4 - 99.9)	25	92	(74 - 99)
Lab tests performed	26	0.0	(0 - 13.2)	25	0	(0 - 13.7)
Oxygen saturation	26	19.2	(6.6 - 39.4)	25	28	(12.1 - 49.4)
Blood biometry	26	88.5	(69.8 - 97.6)	25	52	(31.3 - 72.2)
Hemoculture	26	0.0	(0 - 13.2)	25	4	(0.1 - 20.4)
C-reactive protein	26	42.3	(23.4 - 63.1)	25	64	(42.5 - 82)
Antibiotics administered	26	96.2	(80.4 - 99.9)	25	100	(86.3 - 100)
Evaluated by specialist	26	80.8	(60.6 - 93.4)	25	56	(34.9 - 75.6)
Sepsis treated according to standard	26	0.0	(0 - 13.2)	25	0	(0 - 13.7)

7.13 Neonatal complications management: asphyxia

During the medical record review, doctors and nurses systematically evaluated records from the past two years which met the criteria for asphyxia complication according to the SMI standards. The neonatal complications indicator determines the standard treatment as well as the management protocol for asphyxia cases based on facility EONC level. Asphyxia management is defined as follows:

1. The child must have the following vital signs checked:
 - Pulse / heart rate
 - Respiratory rate
 - APGAR score at one minute
 - APGAR score at five minutes
2. The child must have received an oxygen saturation lab test (*complete facilities only*)
3. The child must have received the procedures:
 - Heat application
 - Evaluated by doctor/nurse (if basic facility) or specialist (if complete facility)
 - Oxygen application (if APGAR \leq 3 at five minutes)
 - AMBU / positive pressure ventilation / endotracheal intubation / chest compressions (if APGAR \leq 3 at five minutes) (*complete facilities*)
 - Referral to complete facility (if APGAR \leq 3 at five minutes) (*basic facilities only*)

Table 7.25: Neonatal asphyxia management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	7	85.7	(42.1 - 99.6)	12	41.7	(15.2 - 72.3)
Pulse / heart rate	7	100.0	(59 - 100)	12	66.7	(34.9 - 90.1)
Respiratory rate	7	100.0	(59 - 100)	12	58.3	(27.7 - 84.8)
APGAR score at 1 minute	7	85.7	(42.1 - 99.6)	12	83.3	(51.6 - 97.9)
APGAR score at 5 minutes	7	85.7	(42.1 - 99.6)	12	83.3	(51.6 - 97.9)
Heat application	7	100.0	(59 - 100)	12	75.0	(42.8 - 94.5)
Evaluated by doctor or nurse	7	100.0	(59 - 100)	12	75.0	(42.8 - 94.5)
Oxygen application (if severe)	-	-	-	-	-	-
Referred to complete facility (if severe)	-	-	-	-	-	-
Asphyxia treated according to standard	7	85.7	(42.1 - 99.6)	12	33.3	(9.9 - 65.1)

Table 7.26: Neonatal asphyxia management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	20	85	(62.1 - 96.8)	4	50	(6.8 - 93.2)
Pulse / heart rate	20	100	(83.2 - 100)	4	100	(39.8 - 100)
Respiratory rate	20	90	(68.3 - 98.8)	4	75	(19.4 - 99.4)
APGAR score at 1 minute	20	95	(75.1 - 99.9)	4	50	(6.8 - 93.2)
APGAR score at 5 minutes	20	95	(75.1 - 99.9)	4	50	(6.8 - 93.2)
Oxygen saturation lab test	20	90	(68.3 - 98.8)	4	50	(6.8 - 93.2)
Heat application	20	90	(68.3 - 98.8)	4	100	(39.8 - 100)
Evaluated by specialist	20	80	(56.3 - 94.3)	4	100	(39.8 - 100)
Oxygen application (if severe)	1	100	(2.5 - 100)	-	-	-
Other procedures (if severe)	1	0	(0 - 97.5)	-	-	-
Asphyxia treated according to standard	20	55	(31.5 - 76.9)	4	25	(0.6 - 80.6)

7.14 Neonatal complications management: low birth weight

During the medical record review, doctors and nurses systematically evaluated records which met the criteria for low birth weight complication according to the SMI standards. The neonatal complications indicator determines the standard treatment as well as the management protocol for cases of low birth weight based on facility EONC level. Low birth weight management is defined as follows:

1. The child must have the following vital signs checked:
 - Weight
 - Pulse / heart rate
 - Respiratory rate
 - Head circumference
 - Silverman score
 - APGAR at 1 or 5 minutes
2. The child must have received the procedures:
 - Gestational age calculated using Capurro/Ballard method
 - Classification according to weight
 - Oxygen saturation
 - Heat application
 - Breastfed or given glucose
 - Evaluated by doctor/nurse (if basic facility) or specialist (if complete facility)
3. The child must have received the appropriate management for any complications due to low birth weight (pneumonia, diarrhea, convulsions, neurologic complications, and hypoglycemia)

4. The child must be referred to a complete facility if associated complication (above) arose or weight <1500 gr (if basic facility)

Table 7.27: Neonatal low birth weight management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Gestational age calculated using Capurro/Ballard	7	28.6	(3.7 - 71)	33	78.8	(61.1 - 91)
Classification based on weight	7	71.4	(29 - 96.3)	33	90.9	(75.7 - 98.1)
Vital signs checked	7	28.6	(3.7 - 71)	33	42.4	(25.5 - 60.8)
Pulse / heart rate	7	100.0	(59 - 100)	33	69.7	(51.3 - 84.4)
Respiratory rate	7	85.7	(42.1 - 99.6)	33	78.8	(61.1 - 91)
Weight	7	85.7	(42.1 - 99.6)	33	97.0	(84.2 - 99.9)
Silverman score	7	0.0	(0 - 41)	33	18.2	(7 - 35.5)
Head circumference	7	28.6	(3.7 - 71)	33	72.7	(54.5 - 86.7)
APGAR at 1 or 5 minutes	7	71.4	(29 - 96.3)	33	66.7	(48.2 - 82)
Heat application	7	100.0	(59 - 100)	33	63.6	(45.1 - 79.6)
Fed glucose	7	100.0	(59 - 100)	33	72.7	(54.5 - 86.7)
Evaluated by doctor or nurse	7	71.4	(29 - 96.3)	33	93.9	(79.8 - 99.3)
Referred to complete facility (if weight <=1500 grams or complications)	1	0.0	(0 - 97.5)	14	57.1	(28.9 - 82.3)
Appropriate treatment:	-	-	-	-	-	-
Pneumonia	-	-	-	-	-	-
Diarrhea	-	-	-	-	-	-
Hypoglycemia	-	-	-	-	-	-
Low birth weight treated according to standard	7	14.3	(0.4 - 57.9)	33	12.1	(3.4 - 28.2)

Table 7.28: Neonatal low birth weight management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Gestational age calculated using Capurro/Ballard	24	79.2	(57.8 - 92.9)	37	81.1	(64.8 - 92)
Classification based on weight	24	75.0	(53.3 - 90.2)	37	83.8	(68 - 93.8)
Vital signs checked	24	54.2	(32.8 - 74.4)	37	62.2	(44.8 - 77.5)
Pulse / heart rate	24	83.3	(62.6 - 95.3)	37	97.3	(85.8 - 99.9)
Respiratory rate	24	79.2	(57.8 - 92.9)	37	86.5	(71.2 - 95.5)
Weight	24	100.0	(85.8 - 100)	37	100.0	(90.5 - 100)
Silverman score	24	12.5	(2.7 - 32.4)	37	24.3	(11.8 - 41.2)
Head circumference	24	75.0	(53.3 - 90.2)	37	89.2	(74.6 - 97)
APGAR at 1 or 5 minutes	24	83.3	(62.6 - 95.3)	37	75.7	(58.8 - 88.2)
Lab tests performed	24	12.5	(2.7 - 32.4)	37	40.5	(24.8 - 57.9)
Oxygen saturation	24	45.8	(25.6 - 67.2)	37	43.2	(27.1 - 60.5)
Glycemia	24	25.0	(9.8 - 46.7)	37	67.6	(50.2 - 82)
Heat application	24	91.7	(73 - 99)	37	81.1	(64.8 - 92)
Fed glucose	24	75.0	(53.3 - 90.2)	37	67.6	(50.2 - 82)
Evaluated by specialist	24	75.0	(53.3 - 90.2)	37	54.1	(36.9 - 70.5)
Appropriate treatment:	5	80.0	(28.4 - 99.5)	5	100.0	(47.8 - 100)
Pneumonia	5	80.0	(28.4 - 99.5)	5	100.0	(47.8 - 100)
Diarrhea	-	-	-	-	-	-
Hypoglycemia	-	-	-	-	-	-
Low birth weight treated according to standard	24	0.0	(0 - 14.2)	37	18.9	(8 - 35.2)

7.15 Neonatal complications management: prematurity

During the medical record review, doctors and nurses systematically evaluated records from the past two years which met the criteria for prematurity complication according to the SMI standards. The neonatal complications indicator determines the standard treatment as well as the management protocol for cases of prematurity based on facility EONC level. Prematurity management is defined as follows:

1. The child must have the following vital signs checked:

- Weight
- Pulse/ heart rate
- Respiratory rate
- Head circumference
- APGAR at 1 or 5 minutes
- Silverman score

2. The child must have received the procedures:

- Gestational age calculated using Capurro/Ballard method
- Classification according to gestational age (if neonate was born in the facility)

- Glycemia lab test
 - Oxygen saturation (*complete only*)
 - Heat application
 - Breastfed or given glucose
 - Evaluated by doctor (if basic facility) or specialist (if complete facility)
3. The child must have received the appropriate management for any complications due to prematurity (pneumonia, diarrhea, convulsions, neurologic complications, and hypoglycemia)
 4. The child must be referred to a complete facility if associated complications (above) arose or gestational age ≤ 34 weeks (if basic facility)

Table 7.29: Neonatal prematurity management, basic facilities

	Second Follow-Up		
	N	%	CI
Gestational age calculated using Capurro/Ballard	13	53.8	(25.1 - 80.8)
Classification based on gestational age	13	46.2	(19.2 - 74.9)
Vital signs checked	13	0.0	(0 - 24.7)
Pulse / heart rate	13	38.5	(13.9 - 68.4)
Respiratory rate	13	38.5	(13.9 - 68.4)
Weight	13	100.0	(75.3 - 100)
Silverman score	13	0.0	(0 - 24.7)
Head circumference	13	76.9	(46.2 - 95)
APGAR at 1 or 5 minutes	13	76.9	(46.2 - 95)
Heat application	13	30.8	(9.1 - 61.4)
Fed glucose	13	53.8	(25.1 - 80.8)
Evaluated by doctor or nurse	13	84.6	(54.6 - 98.1)
Referred to complete facility (if gest age ≤ 34 weeks or complications)	7	57.1	(18.4 - 90.1)
Appropriate treatment:	-	-	-
Pneumonia	-	-	-
Diarrhea	-	-	-
Hypoglycemia	-	-	-
Prematurity treated according to standard	13	0.0	(0 - 24.7)

Table 7.30: Neonatal prematurity management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Gestational age calculated using Capurro/Ballard	20	75	(50.9 - 91.3)	39	82.1	(66.5 - 92.5)
Classification based on gestational age	20	75	(50.9 - 91.3)	39	84.6	(69.5 - 94.1)
Vital signs checked	20	10	(1.2 - 31.7)	39	46.2	(30.1 - 62.8)
Pulse / heart rate	20	100	(83.2 - 100)	39	97.4	(86.5 - 99.9)
Respiratory rate	20	95	(75.1 - 99.9)	39	84.6	(69.5 - 94.1)
Weight	20	90	(68.3 - 98.8)	39	100.0	(91 - 100)
Silverman score	20	10	(1.2 - 31.7)	39	46.2	(30.1 - 62.8)
Head circumference	20	85	(62.1 - 96.8)	39	87.2	(72.6 - 95.7)
APGAR at 1 or 5 minutes	20	80	(56.3 - 94.3)	39	76.9	(60.7 - 88.9)
Lab tests performed	20	15	(3.2 - 37.9)	39	38.5	(23.4 - 55.4)
Oxygen saturation	20	45	(23.1 - 68.5)	39	43.6	(27.8 - 60.4)
Glycemia	20	20	(5.7 - 43.7)	39	69.2	(52.4 - 83)
Heat application	20	90	(68.3 - 98.8)	39	92.3	(79.1 - 98.4)
Fed glucose	20	50	(27.2 - 72.8)	39	69.2	(52.4 - 83)
Evaluated by specialist	20	85	(62.1 - 96.8)	39	56.4	(39.6 - 72.2)
Appropriate treatment:	5	80	(28.4 - 99.5)	16	100.0	(79.4 - 100)
Pneumonia	5	80	(28.4 - 99.5)	16	100.0	(79.4 - 100)
Diarrhea	-	-	-	-	-	-
Hypoglycemia	-	-	-	-	-	-
Prematurity treated according to standard	20	0	(0 - 16.8)	39	7.7	(1.6 - 20.9)

7.16 Neonatal complications indicator performance

The tables below display which medical records reviewed for neonatal complications showed appropriate treatment and management according to the SMI performance indicator.

Table 7.31: Neonatal complications management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Sepsis managed according to SMI standard	27	0.0	(0 - 12.8)	37	5.4	(0.7 - 18.2)
Asphyxia managed according to SMI standard	7	85.7	(42.1 - 99.6)	12	33.3	(9.9 - 65.1)
Low birth weight managed according to SMI standard	7	14.3	(0.4 - 57.9)	33	12.1	(3.4 - 28.2)
Prematurity managed according to SMI standard	-	-	-	13	0.0	(0 - 24.7)
Complications managed according to SMI standard	39	15.4	(5.9 - 30.5)	90	11.1	(5.5 - 19.5)

Table 7.32: Neonatal complications management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Sepsis managed according to SMI standard	26	0.0	(0 - 13.2)	25	0.0	(0 - 13.7)
Asphyxia managed according to SMI standard	20	55.0	(31.5 - 76.9)	4	25.0	(0.6 - 80.6)
Low birth weight managed according to SMI standard	24	0.0	(0 - 14.2)	37	18.9	(8 - 35.2)
Prematurity managed according to SMI standard	20	0.0	(0 - 16.8)	39	7.7	(1.6 - 20.9)
Complications managed according to SMI standard	85	12.9	(6.6 - 22)	89	7.9	(3.2 - 15.5)

8 Chapter 8: Infection control

8.1 Disposal equipment and methodology

During the questionnaire component of the survey, facility representatives were asked about equipment and methodology pertaining to infection control and biohazard disposal.

Table 8.1: Infection control and disposal, ambulatory facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Incinerator at facility	47	6.4	(1.3 - 17.5)	41	12.2	(4.1 - 26.2)	39	2.6	(0.1 - 13.5)
Contract with other facility for disposal (if no incinerator)	42	40.5	(25.6 - 56.7)	36	25.0	(12.1 - 42.2)	40	2.5	(0.1 - 13.2)
Manual for decontamination	46	6.5	(1.4 - 17.9)	40	10.0	(2.8 - 23.7)	41	7.3	(1.5 - 19.9)

* Two facilities at second follow-up indicated 'do not know' to available incinerator at second follow-up and were excluded.

† One facility indicated 'do not know' to decontamination manual at first follow-up and was excluded.

‡ One facility indicated 'do not know' to decontamination manual, and two others indicated 'do not know' to contracting out at baseline evaluation. These are excluded.

Table 8.2: Infection control and disposal, basic facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Incinerator at facility	13	0.0	(0 - 24.7)	15	6.7	(0.2 - 31.9)	17	11.8	(1.5 - 36.4)
Contract with other facility for disposal (if no incinerator)	13	53.8	(25.1 - 80.8)	14	71.4	(41.9 - 91.6)	15	40.0	(16.3 - 67.7)
Manual for decontamination	13	46.2	(19.2 - 74.9)	14	78.6	(49.2 - 95.3)	17	70.6	(44 - 89.7)

* One facility indicated 'do not know' to decontamination manual at first follow-up and was excluded.

Table 8.3: Infection control and disposal, complete facilities

	Baseline			1st Follow-up			2nd Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Incinerator at facility	4	75	(19.4 - 99.4)	4	0	(0 - 60.2)	3	33.3	(0.8 - 90.6)
Contract with other facility for disposal (if no incinerator)	1	100	(2.5 - 100)	4	100	(39.8 - 100)	2	100.0	(15.8 - 100)
Manual for decontamination	4	100	(39.8 - 100)	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)

Appendix A: Indicator matrices - intervention areas

Table A.1: Performance indicator matrix

Code	Description	Baseline			First Follow-Up			Second Follow-Up		
		N	%	CI	N	%	CI	N	%	CI
4050	Immediate maternal postpartum care	161	13.0	(8.3 - 19.2)	266	39.8	(33.9 - 46)	210	37.1	(30.6 - 44.1)
4660	Delivery management	68	50.0	(37.6 - 62.4)	127	50.4	(41.4 - 59.4)	148	96.6	(92.3 - 98.9)
4070	Neonatal complications management	124	13.7	(8.2 - 21)	-	-	-	179	9.5	(5.6 - 14.8)
4080	Maternal complications management	138	14.5	(9.1 - 21.5)	-	-	-	179	21.8	(16 - 28.6)

Table A.2: Monitoring indicator matrix

Code	Description	Baseline			First Follow-Up			Second Follow-Up		
		N	%	CI	N	%	CI	N	%	CI
3030	Four+ ANC visits to standard	58	0.0	(0 - 6.2)	383	10.4	(7.6 - 13.9)	401	0.0	(0 - 0.9)
3040	Timely first ANC visit	56	14.3	(6.4 - 26.2)	383	24.5	(20.3 - 29.2)	361	13.3	(10 - 17.2)
4060	Partograph revision	-	-	-	88	73.9	(63.4 - 82.7)	80	80.0	(69.6 - 88.1)
7010	Childcare services composite	63	14.3	(6.7 - 25.4)	55	3.6	(0.4 - 12.5)	60	31.7	(20.3 - 45)
7020	Pre/postnatal care composite	64	14.1	(6.6 - 25)	56	16.1	(7.6 - 28.3)	60	20.0	(10.8 - 32.3)
7030	Emergency care composite	17	0.0	(0 - 19.5)	12	8.3	(0.2 - 38.5)	20	5.0	(0.1 - 24.9)
7050	Family planning composite	62	61.3	(48.1 - 73.4)	56	75.0	(61.6 - 85.6)	60	16.7	(8.3 - 28.5)
7160	Facility data and reports	-	-	-	14	92.9	(66.1 - 99.8)	16	93.8	(69.8 - 99.8)
8610	Child growth and development	-	-	-	568	81.3	(77.9 - 84.5)	481	89.8	(86.8 - 92.4)

Appendix B: Comparison area tables

Table B2.1: Health facility classification

EONC	Baseline	Second Follow-Up
Ambulatory	21	19
Basic	7	8
Complete	1	3
Total	29	30

Table B2.2: Number of comparison facilities by municipality

Municipality	Baseline Facilities	Second Follow-up Facilities
Chimaltenango Department		
Chimaltenango	-	1
Huehuetanango Department		
Barillas	5	6
San Rafael la Independencia	2	2
San Sebastian Coatan	2	1
San Sebastian Huehuetanango	4	-
Santa Eulalia	3	3
Santiago Chimaltenango	1	1
Quetzaltenango Department		
Quetzaltenango	1	1
San Marcos Department		
La Reforma	1	2
Nuevo Progreso	2	2
San Lorenzo	1	2
San Miguel Ixtahuacán	2	2
Tacaná	5	6
Suchitepequez Department		
Mazatenango	-	1
Total	29	30

Figure B2.1: Geographical representation of comparison-area facilities

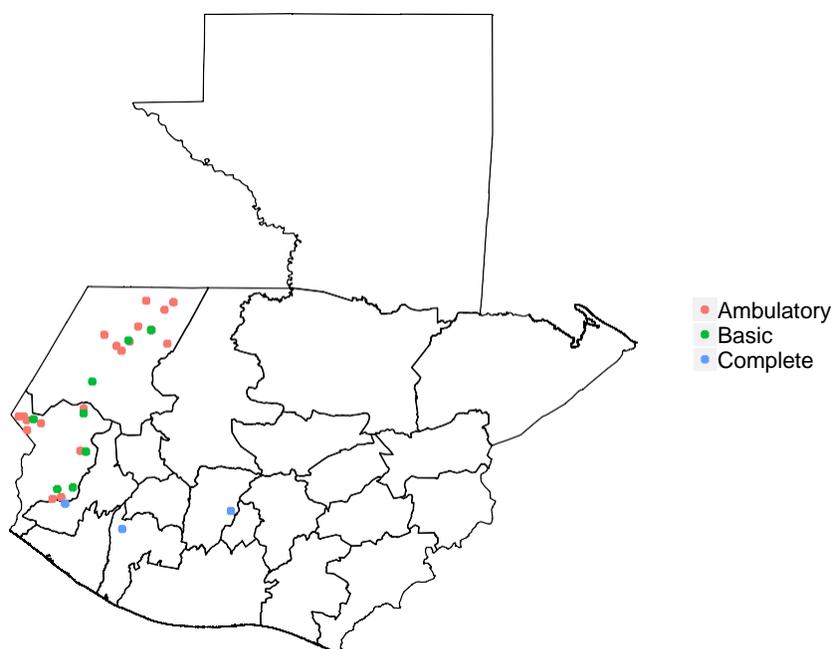


Table B2.3: Medical record extraction, comparison facilities

Record Type	Baseline			Second Follow-Up		
	Ambulatory	Basic	Complete	Ambulatory	Basic	Complete
Growth and development	60	24	4	190	70	0
Antenatal care	82	44	7	192	37	4
Postpartum care	0	40	7	0	78	51
Uncomplicated delivery	0	57	16	0	133	67
Maternal complications	0	0	50	0	33	51
Neonatal complications	0	0	66	0	23	91
Total	142	165	150	382	374	264

Table B2.4: Referrals, ambulatory comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Sends patient referrals to other facilities	21	100	(83.9 - 100)	19	94.7	(74 - 99.9)
Sends referred routine deliveries	-	-	-	18	72.2	(46.5 - 90.3)
Sends referred complicated deliveries	-	-	-	18	100.0	(81.5 - 100)

Table B2.5: Referrals, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Receives referred patients from other facilities	7	100	(59 - 100)	8	87.5	(47.3 - 99.7)
Receives referred routine deliveries	-	-	-	7	100.0	(59 - 100)
Receives referred complicated deliveries	-	-	-	7	85.7	(42.1 - 99.6)
Sends patient referrals to other facilities	7	100	(59 - 100)	8	100.0	(63.1 - 100)
Sends referred routine deliveries	-	-	-	8	0.0	(0 - 36.9)
Sends referred complicated deliveries	-	-	-	8	100.0	(63.1 - 100)

Table B2.6: Referrals, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Receives referred patients from other facilities	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Receives referred routine deliveries	-	-	-	3	100.0	(29.2 - 100)
Receives referred complicated deliveries	-	-	-	3	100.0	(29.2 - 100)
Sends patient referrals to other facilities	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Sends referred routine deliveries	-	-	-	3	0.0	(0 - 70.8)
Sends referred complicated deliveries	-	-	-	3	33.3	(0.8 - 90.6)

Table B2.7: Requested referral documents, second follow-up evaluation

	Basic			Complete		
	N	%	CI	N	%	CI
Routine Deliveries						
Transfer form	7	0.0	(0 - 41)	3	0.0	(0 - 70.8)
Patient medical record	7	14.3	(0.4 - 57.9)	3	0.0	(0 - 70.8)
Lab tests	7	0.0	(0 - 41)	3	0.0	(0 - 70.8)
Proof of insurance	7	0.0	(0 - 41)	3	0.0	(0 - 70.8)
Referral sheet	7	85.7	(42.1 - 99.6)	3	66.7	(9.4 - 99.2)
Other documentation	7	57.1	(18.4 - 90.1)	3	66.7	(9.4 - 99.2)
Complicated Deliveries						
Transfer form	6	0.0	(0 - 45.9)	3	0.0	(0 - 70.8)
Patient medical record	6	16.7	(0.4 - 64.1)	3	0.0	(0 - 70.8)
Lab tests	6	0.0	(0 - 45.9)	3	0.0	(0 - 70.8)
Proof of insurance	6	0.0	(0 - 45.9)	3	0.0	(0 - 70.8)
Referral sheet	6	83.3	(35.9 - 99.6)	3	100.0	(29.2 - 100)
Other documentation	6	33.3	(4.3 - 77.7)	3	33.3	(0.8 - 90.6)

Table B2.8: Personnel employed, ambulatory comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
General physician	21	9.5	(1.2 - 30.4)	19	10.5	(1.3 - 33.1)
Nurse	21	42.9	(21.8 - 66)	19	73.7	(48.8 - 90.9)
Auxiliary nurse	21	95.2	(76.2 - 99.9)	19	100.0	(82.4 - 100)
Midwife	21	38.1	(18.1 - 61.6)	19	5.3	(0.1 - 26)
Social worker	21	14.3	(3 - 36.3)	19	5.3	(0.1 - 26)
Health promoter	21	33.3	(14.6 - 57)	19	0.0	(0 - 17.6)
Equipment maintenance worker	20	15.0	(3.2 - 37.9)	19	5.3	(0.1 - 26)
Building maintenance worker	21	14.3	(3 - 36.3)	19	21.1	(6.1 - 45.6)

* Equipment maintenance worker data missing for one facility at baseline.

Table B2.9: Personnel employed, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
General physician	7	85.7	(42.1 - 99.6)	8	87.5	(47.3 - 99.7)
Nurse	7	100.0	(59 - 100)	8	100.0	(63.1 - 100)
Auxiliary nurse	7	100.0	(59 - 100)	8	100.0	(63.1 - 100)
Midwife	7	57.1	(18.4 - 90.1)	8	0.0	(0 - 36.9)
Social worker	7	42.9	(9.9 - 81.6)	8	25.0	(3.2 - 65.1)
Health promoter	6	33.3	(4.3 - 77.7)	8	0.0	(0 - 36.9)
Pediatrician	7	0.0	(0 - 41)	8	12.5	(0.3 - 52.7)
Nutritionist	7	42.9	(9.9 - 81.6)	8	12.5	(0.3 - 52.7)
Pharmacy dispenser	7	14.3	(0.4 - 57.9)	8	87.5	(47.3 - 99.7)
Lab technician	7	57.1	(18.4 - 90.1)	8	37.5	(8.5 - 75.5)
Internist	-	-	-	8	12.5	(0.3 - 52.7)
Gynecologist	-	-	-	8	12.5	(0.3 - 52.7)
Surgeon	-	-	-	8	12.5	(0.3 - 52.7)
Anesthesiologist	-	-	-	8	12.5	(0.3 - 52.7)
Emergency medical technician	-	-	-	8	12.5	(0.3 - 52.7)
Radiology technician	-	-	-	8	12.5	(0.3 - 52.7)
Ambulance driver	-	-	-	8	100.0	(63.1 - 100)
Equipment maintenance worker	7	0.0	(0 - 41)	8	12.5	(0.3 - 52.7)
Building maintenance worker	7	100.0	(59 - 100)	8	100.0	(63.1 - 100)

Table B2.10: Personnel employed, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
General physician	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Nurse	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Auxiliary nurse	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Midwife	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
Social worker	1	100	(2.5 - 100)	3	66.7	(9.4 - 99.2)
Health promoter	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
Pediatrician	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Nutritionist	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Pharmacy dispenser	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Lab technician	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Internist	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Gynecologist	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Surgeon	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Anesthesiologist	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Emergency medical technician	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
Radiology technician	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Ambulance driver	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Equipment maintenance worker	1	100	(2.5 - 100)	3	66.7	(9.4 - 99.2)
Building maintenance worker	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)

* One facility responded 'do not know' to health promoter at baseline and was excluded.

Table B2.11: Access to electricity and water, ambulatory comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Functional electricity	21	81.0	(58.1 - 94.6)	19	94.7	(74 - 99.9)
Electricity source:						
Public central supply	17	100.0	(80.5 - 100)	18	88.9	(65.3 - 98.6)
Private supply	17	0.0	(0 - 19.5)	18	11.1	(1.4 - 34.7)
In-facility generator	17	0.0	(0 - 19.5)	18	0.0	(0 - 18.5)
solar generator	17	0.0	(0 - 19.5)	18	5.6	(0.1 - 27.3)
Other	17	0.0	(0 - 19.5)	18	0.0	(0 - 18.5)
Water source:						
Piped into facility	21	57.1	(34 - 78.2)	19	78.9	(54.4 - 93.9)
Public well (protected)	21	0.0	(0 - 16.1)	19	5.3	(0.1 - 26)
Facility well (protected)	21	4.8	(0.1 - 23.8)	19	0.0	(0 - 17.6)
Unprotected well	21	4.8	(0.1 - 23.8)	19	0.0	(0 - 17.6)
Hand pump	21	0.0	(0 - 16.1)	19	0.0	(0 - 17.6)
Bottled water	21	0.0	(0 - 16.1)	19	0.0	(0 - 17.6)
Tanker	21	0.0	(0 - 16.1)	19	0.0	(0 - 17.6)
Rainwater	21	0.0	(0 - 16.1)	19	10.5	(1.3 - 33.1)
Other	21	47.6	(25.7 - 70.2)	19	5.3	(0.1 - 26)

Table B2.12: Access to electricity and water, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Functional electricity	7	100.0	(59 - 100)	8	100.0	(63.1 - 100)
Electricity source:						
Public central supply	7	100.0	(59 - 100)	8	100.0	(63.1 - 100)
Private supply	7	0.0	(0 - 41)	8	0.0	(0 - 36.9)
In-facility generator	7	0.0	(0 - 41)	8	0.0	(0 - 36.9)
solar generator	7	0.0	(0 - 41)	8	0.0	(0 - 36.9)
Other	7	14.3	(0.4 - 57.9)	8	0.0	(0 - 36.9)
Water source:						
Piped into facility	7	71.4	(29 - 96.3)	8	100.0	(63.1 - 100)
Public well (protected)	7	0.0	(0 - 41)	8	0.0	(0 - 36.9)
Facility well (protected)	7	0.0	(0 - 41)	8	12.5	(0.3 - 52.7)
Unprotected well	7	0.0	(0 - 41)	8	0.0	(0 - 36.9)
Hand pump	7	0.0	(0 - 41)	8	0.0	(0 - 36.9)
Bottled water	7	0.0	(0 - 41)	8	0.0	(0 - 36.9)
Tanker	7	0.0	(0 - 41)	8	12.5	(0.3 - 52.7)
Rainwater	7	0.0	(0 - 41)	8	0.0	(0 - 36.9)
Other	7	42.9	(9.9 - 81.6)	8	0.0	(0 - 36.9)

Table B2.13: Access to electricity and water, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Functional electricity	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Electricity source:						
Public central supply	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Private supply	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
In-facility generator	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
solar generator	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
Other	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
Water source:						
Piped into facility	1	0	(0 - 97.5)	3	100.0	(29.2 - 100)
Public well (protected)	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
Facility well (protected)	1	100	(2.5 - 100)	3	33.3	(0.8 - 90.6)
Unprotected well	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
Hand pump	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
Bottled water	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
Tanker	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
Rainwater	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
Other	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)

Table B2.14: Access to internet, ambulatory comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Internet connection	21	28.6	(11.3 - 52.2)	19	10.5	(1.3 - 33.1)

Table B2.15: Access to internet, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Internet connection	7	57.1	(18.4 - 90.1)	8	50	(15.7 - 84.3)

Table B2.16: Access to internet, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Internet connection	1	100	(2.5 - 100)	3	100	(29.2 - 100)

Table B2.17: Situation room graphs and reports monitoring indicator, CAPs and CAIMIs (comparison areas)

	2nd Follow-Up		
	N	%	CI
At least one child care visual:	7	85.7	(42.1 - 99.6)
Vaccination topics	7	71.4	(29 - 96.3)
Micronutrient supplementation	7	85.7	(42.1 - 99.6)
At least one maternal/neonatal care visual:	7	85.7	(42.1 - 99.6)
Family planning methods distributed	7	57.1	(18.4 - 90.1)
Prenatal care coverage	7	57.1	(18.4 - 90.1)
Delivery coverage	7	57.1	(18.4 - 90.1)
Postpartum coverage	7	57.1	(18.4 - 90.1)
Community visits	7	57.1	(18.4 - 90.1)
At least one of each type	7	85.7	(42.1 - 99.6)

Table B3.1: Child health care services provision, ambulatory comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Provides childcare services	21	100	(83.9 - 100)	19	100.0	(82.4 - 100)
Vaccinates children under five	21	100	(83.9 - 100)	19	100.0	(82.4 - 100)
Childcare area						
Visual and auditory privacy	20	25	(8.7 - 49.1)	19	84.2	(60.4 - 96.6)
Non private area	20	0	(0 - 16.8)	19	15.8	(3.4 - 39.6)
Visual privacy only	20	70	(45.7 - 88.1)	19	0.0	(0 - 17.6)
Other	20	0	(0 - 16.8)	19	0.0	(0 - 17.6)
Do not provide service	20	5	(0.1 - 24.9)	19	0.0	(0 - 17.6)

* Childcare area data missing for one facility at baseline.

Table B3.2: Child health care services provision, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Provides childcare services	7	100.0	(59 - 100)	8	100.0	(63.1 - 100)
Vaccinates children under five	7	100.0	(59 - 100)	8	100.0	(63.1 - 100)
Childcare area						
Visual and auditory privacy	7	14.3	(0.4 - 57.9)	8	75.0	(34.9 - 96.8)
Non private area	7	28.6	(3.7 - 71)	8	12.5	(0.3 - 52.7)
Visual privacy only	7	57.1	(18.4 - 90.1)	8	0.0	(0 - 36.9)
Other	7	0.0	(0 - 41)	8	12.5	(0.3 - 52.7)
Do not provide service	7	0.0	(0 - 41)	8	0.0	(0 - 36.9)

Table B3.3: Child health care services provision, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Provides childcare services	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Vaccinates children under five	1	100	(2.5 - 100)	3	33.3	(0.8 - 90.6)
Childcare area						
Visual and auditory privacy	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Non private area	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
Visual privacy only	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
Other	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
Do not provide service	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)

Table B3.4: Child health care equipment observed and functional, ambulatory comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Scale	19	89.5	(66.9 - 98.7)	18	100.0	(81.5 - 100)
height rod	19	89.5	(66.9 - 98.7)	18	100.0	(81.5 - 100)
Stethoscope / pediatric stethoscope	19	84.2	(60.4 - 96.6)	18	100.0	(81.5 - 100)
Thermometer	19	89.5	(66.9 - 98.7)	18	77.8	(52.4 - 93.6)
All equipment observed and functional	19	52.6	(28.9 - 75.6)	18	72.2	(46.5 - 90.3)

Table B3.5: Child health care equipment observed and functional, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Pediatric scale	7	100.0	(59 - 100)	8	75.0	(34.9 - 96.8)
Scale	7	85.7	(42.1 - 99.6)	8	100.0	(63.1 - 100)
height rod	7	85.7	(42.1 - 99.6)	8	100.0	(63.1 - 100)
Pediatric stethoscope	7	42.9	(9.9 - 81.6)	8	25.0	(3.2 - 65.1)
Blood pressure apparatus	7	42.9	(9.9 - 81.6)	8	12.5	(0.3 - 52.7)
All equipment observed and functional	7	28.6	(3.7 - 71)	8	0.0	(0 - 36.9)

Table B3.6: Child health care equipment observed and functional, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Pediatric scale	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Scale	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
height rod	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Pediatric stethoscope	1	100	(2.5 - 100)	3	66.7	(9.4 - 99.2)
Blood pressure apparatus	1	100	(2.5 - 100)	3	66.7	(9.4 - 99.2)
All equipment observed and functional	1	100	(2.5 - 100)	3	33.3	(0.8 - 90.6)

Table B3.7: Child health care drugs and supplements, ambulatory comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Oral rehydration salts	19	89.5	(66.9 - 98.7)	18	83.3	(58.6 - 96.4)
Micronutrients / ferrous sulfate	19	94.7	(74 - 99.9)	18	100.0	(81.5 - 100)
Zinc sulfate / gluconate	19	73.7	(48.8 - 90.9)	18	83.3	(58.6 - 96.4)
Albendazole / mebendazole	19	84.2	(60.4 - 96.6)	18	100.0	(81.5 - 100)
Antibiotics	19	94.7	(74 - 99.9)	2	100.0	(15.8 - 100)
All drugs available on day of observation	19	57.9	(33.5 - 79.7)	18	66.7	(41 - 86.7)
All drugs available in past three months	19	57.9	(33.5 - 79.7)	18	44.4	(21.5 - 69.2)

* Antibiotics only required at facilities that employ a doctor on staff.

† Three-month stock data not available for some facilities at baseline and first follow-up evaluations.

Table B3.8: Child health care drugs and supplements, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Oral rehydration salts	7	85.7	(42.1 - 99.6)	8	87.5	(47.3 - 99.7)
Micronutrients / ferrous sulfate	7	85.7	(42.1 - 99.6)	8	100.0	(63.1 - 100)
Zinc sulfate / gluconate	7	100.0	(59 - 100)	8	100.0	(63.1 - 100)
Albendazole / mebendazole	7	57.1	(18.4 - 90.1)	8	87.5	(47.3 - 99.7)
Antibiotics	7	0.0	(0 - 41)	8	100.0	(63.1 - 100)
Ringer's lactate / Hartman's / saline solution	7	100.0	(59 - 100)	8	100.0	(63.1 - 100)
All drugs available on day of observation	7	42.9	(9.9 - 81.6)	8	75.0	(34.9 - 96.8)
All drugs available in past three months	7	42.9	(9.9 - 81.6)	8	50.0	(15.7 - 84.3)

* Three-month stock data not available for some facilities at baseline and first follow-up evaluations.

Table B3.9: Child health care drugs and supplements, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Oral rehydration salts	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Micronutrients / ferrous sulfate	1	100	(2.5 - 100)	3	33.3	(0.8 - 90.6)
Zinc sulfate / gluconate	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Albendazole / mebendazole	1	100	(2.5 - 100)	3	33.3	(0.8 - 90.6)
Antibiotics	1	0	(0 - 97.5)	3	100.0	(29.2 - 100)
Ringer's lactate / Hartman's / saline solution / dextrose	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
All drugs available on day of observation	1	100	(2.5 - 100)	3	33.3	(0.8 - 90.6)
All drugs available in past three months	1	100	(2.5 - 100)	3	0.0	(0 - 70.8)

* Dextrose not captured at baseline evaluation.

† Three-month stock data not available for some facilities at baseline and first follow-up evaluations.

Table B3.10: Child health care vaccines, ambulatory comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Pentavalent / (DPT + HiB + HepB)	10	100	(69.2 - 100)	11	90.9	(58.7 - 99.8)
Polio	10	100	(69.2 - 100)	11	81.8	(48.2 - 97.7)
Measles, mumps, rubella	10	100	(69.2 - 100)	11	81.8	(48.2 - 97.7)
BCG	10	90	(55.5 - 99.7)	11	72.7	(39 - 94)
Rotavirus	10	100	(69.2 - 100)	11	81.8	(48.2 - 97.7)
Pneumococcal conjugate	10	100	(69.2 - 100)	11	81.8	(48.2 - 97.7)
All vaccines observed day of survey	10	90	(55.5 - 99.7)	11	72.7	(39 - 94)
All vaccines continuously available in past 3 months	10	90	(55.5 - 99.7)	11	72.7	(39 - 94)

* DPT + HepB + Hib not captured as Pentavalent alternatives at baseline and first follow-up.

† Three-month stock data not available for some facilities at baseline evaluation.

Table B3.11: Child health care vaccines, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Pentavalent / (DPT + HiB + HepB)	7	100.0	(59 - 100)	8	75.0	(34.9 - 96.8)
Polio	7	100.0	(59 - 100)	8	87.5	(47.3 - 99.7)
Measles, mumps, rubella	7	100.0	(59 - 100)	8	87.5	(47.3 - 99.7)
BCG	7	100.0	(59 - 100)	8	100.0	(63.1 - 100)
Rotavirus	7	71.4	(29 - 96.3)	8	75.0	(34.9 - 96.8)
Pneumococcal conjugate	7	85.7	(42.1 - 99.6)	8	75.0	(34.9 - 96.8)
All vaccines observed day of survey	7	71.4	(29 - 96.3)	8	62.5	(24.5 - 91.5)
All vaccines continuously available in past 3 months	7	71.4	(29 - 96.3)	8	62.5	(24.5 - 91.5)

* DPT + HepB + Hib not captured as Pentavalent alternatives at baseline and first follow-up.

† Three-month stock data not available for some facilities at baseline evaluation.

Table B3.12: Child health care vaccines, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Pentavalent / (DPT + HiB + HepB)	1	100	(2.5 - 100)	1	0	(0 - 97.5)
Polio	1	100	(2.5 - 100)	1	0	(0 - 97.5)
Measles, mumps, rubella	1	100	(2.5 - 100)	1	0	(0 - 97.5)
BCG	1	100	(2.5 - 100)	1	100	(2.5 - 100)
Rotavirus	1	100	(2.5 - 100)	1	0	(0 - 97.5)
Pneumococcal conjugate	1	100	(2.5 - 100)	1	0	(0 - 97.5)
All vaccines observed day of survey	1	100	(2.5 - 100)	1	0	(0 - 97.5)
All vaccines continuously available in past 3 months	1	100	(2.5 - 100)	1	0	(0 - 97.5)

* DPT + HepB + Hib not captured as Pentavalent alternatives at baseline and first follow-up.

† Three-month stock data not available for some facilities at baseline evaluation.

Table B3.13: Child health care composite indicator, ambulatory comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
All equipment observed and functional	19	52.6	(28.9 - 75.6)	18	72.2	(46.5 - 90.3)
All pharmacy inputs observed day of survey	19	57.9	(33.5 - 79.7)	18	66.7	(41 - 86.7)
All pharmacy inputs continuously available in past three months	19	57.9	(33.5 - 79.7)	18	44.4	(21.5 - 69.2)
All vaccines continuously observed day of survey	10	90.0	(55.5 - 99.7)	11	72.7	(39 - 94)
All vaccines continuously available in past three months	10	90.0	(55.5 - 99.7)	11	72.7	(39 - 94)
Child health care provision according to standard	19	36.8	(16.3 - 61.6)	18	38.9	(17.3 - 64.3)

Table B3.14: Child health care composite indicator, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
All equipment observed and functional	7	28.6	(3.7 - 71)	8	0.0	(0 - 36.9)
All pharmacy inputs observed day of survey	7	42.9	(9.9 - 81.6)	8	75.0	(34.9 - 96.8)
All pharmacy inputs continuously available in past three months	7	42.9	(9.9 - 81.6)	8	50.0	(15.7 - 84.3)
All vaccines continuously observed day of survey	7	71.4	(29 - 96.3)	8	62.5	(24.5 - 91.5)
All vaccines continuously available in past three months	7	71.4	(29 - 96.3)	8	62.5	(24.5 - 91.5)
Child health care provision according to standard	7	14.3	(0.4 - 57.9)	8	0.0	(0 - 36.9)

Table B3.15: Child health care composite indicator, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
All equipment observed and functional	1	100	(2.5 - 100)	3	33.3	(0.8 - 90.6)
All pharmacy inputs observed day of survey	1	100	(2.5 - 100)	3	33.3	(0.8 - 90.6)
All pharmacy inputs continuously available in past three months	1	100	(2.5 - 100)	3	0.0	(0 - 70.8)
All vaccines continuously observed day of survey	1	100	(2.5 - 100)	1	0.0	(0 - 97.5)
All vaccines continuously available in past three months	1	100	(2.5 - 100)	1	0.0	(0 - 97.5)
Child health care provision according to standard	1	100	(2.5 - 100)	3	0.0	(0 - 70.8)

Table B3.16: Growth and development monitoring indicator, ambulatory comparison facilities

	2nd Follow-Up		
	N	%	CI
Height checked	186	96.8	(93.1 - 98.8)
Weight checked	186	96.8	(93.1 - 98.8)
Counselling	186	90.3	(85.1 - 94.2)
Growth and development visit according to standard	186	89.8	(84.5 - 93.7)

Table B3.17: Growth and development monitoring indicator, basic comparison facilities

	2nd Follow-Up		
	N	%	CI
Height checked	68	97.1	(89.8 - 99.6)
Weight checked	68	97.1	(89.8 - 99.6)
Counselling	68	94.1	(85.6 - 98.4)
Growth and development visit according to standard	68	94.1	(85.6 - 98.4)

Table B4.1: Immunization services provision, ambulatory comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Vaccinates children under five	21	100	(83.9 - 100)	19	100.0	(82.4 - 100)
Immunization area						
Visual and auditory privacy	20	25	(8.7 - 49.1)	19	84.2	(60.4 - 96.6)
Non private area	20	15	(3.2 - 37.9)	19	15.8	(3.4 - 39.6)
Visual privacy only	20	55	(31.5 - 76.9)	19	0.0	(0 - 17.6)
Other	20	0	(0 - 16.8)	19	0.0	(0 - 17.6)
Do not provide service	20	5	(0.1 - 24.9)	19	0.0	(0 - 17.6)

* Immunization area data missing for one facility at baseline.

Table B4.2: Immunization services provision, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Vaccinates children under five	7	100.0	(59 - 100)	8	100	(63.1 - 100)
Immunization area						
Visual and auditory privacy	6	33.3	(4.3 - 77.7)	8	75	(34.9 - 96.8)
Non private area	6	16.7	(0.4 - 64.1)	8	25	(3.2 - 65.1)
Visual privacy only	6	50.0	(11.8 - 88.2)	8	0	(0 - 36.9)
Other	6	0.0	(0 - 45.9)	8	0	(0 - 36.9)
Do not provide service	6	0.0	(0 - 45.9)	8	0	(0 - 36.9)

* Immunization area data missing for one facility at baseline.

Table B4.3: Immunization services provision, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Vaccinates children under five	1	100	(2.5 - 100)	3	33.3	(0.8 - 90.6)
Immunization area						
Visual and auditory privacy	1	100	(2.5 - 100)	3	33.3	(0.8 - 90.6)
Non private area	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
Visual privacy only	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
Other	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
Do not provide service	1	0	(0 - 97.5)	3	66.7	(9.4 - 99.2)

Table B4.4: Vaccine storage (if provided), ambulatory comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Stores vaccines	21	71.4	(47.8 - 88.7)	19	94.7	(74 - 99.9)
Collected from another health facility	21	14.3	(3 - 36.3)	19	5.3	(0.1 - 26)
Delivered when immunization services provided	21	14.3	(3 - 36.3)	19	0.0	(0 - 17.6)
Does not store vaccines	21	0.0	(0 - 16.1)	19	0.0	(0 - 17.6)
Don't know / did not respond	21	0.0	(0 - 16.1)	19	0.0	(0 - 17.6)

Table B4.5: Vaccine storage (if provided), basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Stores vaccines	7	100	(59 - 100)	8	100	(63.1 - 100)
Collected from another health facility	7	0	(0 - 41)	8	0	(0 - 36.9)
Delivered when immunization services provided	7	0	(0 - 41)	8	0	(0 - 36.9)
Does not store vaccines	7	0	(0 - 41)	8	0	(0 - 36.9)
Don't know / did not respond	7	0	(0 - 41)	8	0	(0 - 36.9)

Table B4.6: Vaccine storage (if provided), complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Stores vaccines	1	100	(2.5 - 100)	3	100	(29.2 - 100)
Collected from another health facility	1	0	(0 - 97.5)	3	0	(0 - 70.8)
Delivered when immunization services provided	1	0	(0 - 97.5)	3	0	(0 - 70.8)
Does not store vaccines	1	0	(0 - 97.5)	3	0	(0 - 70.8)
Don't know / did not respond	1	0	(0 - 97.5)	3	0	(0 - 70.8)

Table B4.7: Vaccine supply, ambulatory comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Ordering strategy						
Determines own need	15	100.0	(78.2 - 100)	18	100.0	(81.5 - 100)
Need determined elsewhere	15	0.0	(0 - 21.8)	18	0.0	(0 - 18.5)
Both (differ by vaccine)	15	0.0	(0 - 21.8)	18	0.0	(0 - 18.5)
Time to receive supplies						
One day	15	73.3	(44.9 - 92.2)	18	66.7	(41 - 86.7)
2 - 7 days	15	13.3	(1.7 - 40.5)	18	16.7	(3.6 - 41.4)
More than one week	15	6.7	(0.2 - 31.9)	18	16.7	(3.6 - 41.4)
Reception of quantity ordered						
Always	15	86.7	(59.5 - 98.3)	18	61.1	(35.7 - 82.7)
Almost always	15	0.0	(0 - 21.8)	18	38.9	(17.3 - 64.3)
Almost never	15	13.3	(1.7 - 40.5)	18	0.0	(0 - 18.5)

Table B4.8: Vaccine supply, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Ordering strategy						
Determines own need	7	85.7	(42.1 - 99.6)	8	100.0	(63.1 - 100)
Need determined elsewhere	7	14.3	(0.4 - 57.9)	8	0.0	(0 - 36.9)
Both (differ by vaccine)	7	0.0	(0 - 41)	8	0.0	(0 - 36.9)
Time to receive supplies						
One day	7	100.0	(59 - 100)	8	87.5	(47.3 - 99.7)
2 - 7 days	7	0.0	(0 - 41)	8	12.5	(0.3 - 52.7)
More than one week	7	0.0	(0 - 41)	8	0.0	(0 - 36.9)
Reception of quantity ordered						
Always	7	28.6	(3.7 - 71)	8	87.5	(47.3 - 99.7)
Almost always	7	71.4	(29 - 96.3)	8	12.5	(0.3 - 52.7)
Almost never	7	0.0	(0 - 41)	8	0.0	(0 - 36.9)

Table B4.9: Vaccine supply, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Ordering strategy						
Determines own need	1	100	(2.5 - 100)	3	66.7	(9.4 - 99.2)
Need determined elsewhere	1	0	(0 - 97.5)	3	33.3	(0.8 - 90.6)
Both (differ by vaccine)	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
Time to receive supplies						
One day	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
2 - 7 days	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
More than one week	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
Reception of quantity ordered						
Always	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Almost always	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
Almost never	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)

Table B4.10: Vaccine storage equipment, ambulatory comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Electric fridge	15	93.3	(68.1 - 99.8)	18	88.9	(65.3 - 98.6)
Kerosene fridge	15	100.0	(78.2 - 100)	18	0.0	(0 - 18.5)
Gas fridge	15	100.0	(78.2 - 100)	18	5.6	(0.1 - 27.3)
Solar fridge	15	93.3	(68.1 - 99.8)	18	5.6	(0.1 - 27.3)
Cold box	15	100.0	(78.2 - 100)	18	38.9	(17.3 - 64.3)

Table B4.11: Vaccine storage equipment, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Electric fridge	7	100.0	(59 - 100)	8	100.0	(63.1 - 100)
Kerosene fridge	7	100.0	(59 - 100)	8	12.5	(0.3 - 52.7)
Gas fridge	7	71.4	(29 - 96.3)	8	0.0	(0 - 36.9)
Solar fridge	7	100.0	(59 - 100)	8	12.5	(0.3 - 52.7)
Cold box	7	100.0	(59 - 100)	8	100.0	(63.1 - 100)

Table B4.12: Vaccine storage equipment, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Electric fridge	1	100	(2.5 - 100)	1	100	(2.5 - 100)
Kerosene fridge	1	100	(2.5 - 100)	1	0	(0 - 97.5)
Gas fridge	1	100	(2.5 - 100)	1	0	(0 - 97.5)
Solar fridge	1	100	(2.5 - 100)	1	0	(0 - 97.5)
Cold box	1	100	(2.5 - 100)	1	100	(2.5 - 100)

Table B4.13: Vaccines observed, ambulatory comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Pentavalent (DPT + HepB + Hib)	11	100.0	(71.5 - 100)	16	93.8	(69.8 - 99.8)
Polio	11	100.0	(71.5 - 100)	16	87.5	(61.7 - 98.4)
Measles, mumps, rubella	11	100.0	(71.5 - 100)	16	87.5	(61.7 - 98.4)
Rotavirus	11	100.0	(71.5 - 100)	16	87.5	(61.7 - 98.4)
Pneumococcal conjugate	11	100.0	(71.5 - 100)	16	87.5	(61.7 - 98.4)
BCG	11	90.9	(58.7 - 99.8)	16	81.2	(54.4 - 96)
Influenza	11	72.7	(39 - 94)	16	25.0	(7.3 - 52.4)
Tetanus	11	100.0	(71.5 - 100)	16	87.5	(61.7 - 98.4)

* DPT + HepB + Hib not captured as Pentavalent alternatives at baseline and first follow-up.

Table B4.14: Vaccines observed, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Pentavalent (DPT + HepB + Hib)	7	100.0	(59 - 100)	8	75.0	(34.9 - 96.8)
Polio	7	100.0	(59 - 100)	8	87.5	(47.3 - 99.7)
Measles, mumps, rubella	7	100.0	(59 - 100)	8	87.5	(47.3 - 99.7)
Rotavirus	7	71.4	(29 - 96.3)	8	75.0	(34.9 - 96.8)
Pneumococcal conjugate	7	85.7	(42.1 - 99.6)	8	75.0	(34.9 - 96.8)
BCG	7	100.0	(59 - 100)	8	100.0	(63.1 - 100)
Influenza	7	71.4	(29 - 96.3)	8	25.0	(3.2 - 65.1)
Tetanus	7	100.0	(59 - 100)	8	87.5	(47.3 - 99.7)

* DPT + HepB + Hib not captured as Pentavalent alternatives at baseline and first follow-up.

Table B4.15: Vaccines observed, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Pentavalent (DPT + HepB + Hib)	1	100	(2.5 - 100)	1	0	(0 - 97.5)
Polio	1	100	(2.5 - 100)	1	0	(0 - 97.5)
Measles, mumps, rubella	1	100	(2.5 - 100)	1	0	(0 - 97.5)
Rotavirus	1	100	(2.5 - 100)	1	0	(0 - 97.5)
Pneumococcal conjugate	1	100	(2.5 - 100)	1	0	(0 - 97.5)
BCG	1	100	(2.5 - 100)	1	100	(2.5 - 100)
Influenza	1	100	(2.5 - 100)	1	0	(0 - 97.5)
Tetanus	1	100	(2.5 - 100)	1	100	(2.5 - 100)

* DPT + HepB + Hib not captured as Pentavalent alternatives at baseline and first follow-up.

Table B5.1: Family planning services provision, ambulatory comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Offers family planning services	21	100	(83.9 - 100)	19	100.0	(82.4 - 100)
Family planning area						
Visual and auditory privacy	20	25	(8.7 - 49.1)	19	94.7	(74 - 99.9)
Non private area	20	5	(0.1 - 24.9)	19	5.3	(0.1 - 26)
Visual privacy only	20	70	(45.7 - 88.1)	19	0.0	(0 - 17.6)
Other	20	0	(0 - 16.8)	19	0.0	(0 - 17.6)
Do not provide service	20	0	(0 - 16.8)	19	0.0	(0 - 17.6)

Table B5.2: Family planning services provision, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Offers family planning services	7	100.0	(59 - 100)	8	100	(63.1 - 100)
Family planning area						
Visual and auditory privacy	7	28.6	(3.7 - 71)	8	100	(63.1 - 100)
Non private area	7	0.0	(0 - 41)	8	0	(0 - 36.9)
Visual privacy only	7	71.4	(29 - 96.3)	8	0	(0 - 36.9)
Other	7	0.0	(0 - 41)	8	0	(0 - 36.9)
Do not provide service	7	0.0	(0 - 41)	8	0	(0 - 36.9)

Table B5.3: Family planning services provision, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Offers family planning services	1	100	(2.5 - 100)	3	100	(29.2 - 100)
Family planning area						
Visual and auditory privacy	1	0	(0 - 97.5)	3	100	(29.2 - 100)
Non private area	1	0	(0 - 97.5)	3	0	(0 - 70.8)
Visual privacy only	1	100	(2.5 - 100)	3	0	(0 - 70.8)
Other	1	0	(0 - 97.5)	3	0	(0 - 70.8)
Do not provide service	1	0	(0 - 97.5)	3	0	(0 - 70.8)

Table B5.4: Family planning composite indicator, ambulatory comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Male condom	20	100	(83.2 - 100)	19	57.9	(33.5 - 79.7)
Any oral pill	20	80	(56.3 - 94.3)	19	73.7	(48.8 - 90.9)
Any injectable	20	95	(75.1 - 99.9)	19	100.0	(82.4 - 100)
All methods continuously in stock in past three months	20	70	(45.7 - 88.1)	19	5.3	(0.1 - 26)
Family planning services according to SMI standard	20	70	(45.7 - 88.1)	19	0.0	(0 - 17.6)

* Three-month stock data unavailable for some facilities at baseline.

Table B5.5: Family planning composite indicator, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Male condom	7	100.0	(59 - 100)	8	25.0	(3.2 - 65.1)
Any oral pill	7	100.0	(59 - 100)	8	87.5	(47.3 - 99.7)
Any injectable	7	100.0	(59 - 100)	8	100.0	(63.1 - 100)
Intrauterine device	7	85.7	(42.1 - 99.6)	8	75.0	(34.9 - 96.8)
All methods continuously in stock in past three months	7	85.7	(42.1 - 99.6)	8	12.5	(0.3 - 52.7)
Family planning services according to SMI standard	7	85.7	(42.1 - 99.6)	8	12.5	(0.3 - 52.7)

* Three-month stock only evaluated for condoms, pills, and injectables at baseline evaluation.

† Three-month stock data unavailable for some facilities at baseline.

Table B5.6: Family planning services composite indicator, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Male condom	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Any oral pill	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Any injectable	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Intrauterine device	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
All methods continuously in stock in past three months	1	100	(2.5 - 100)	3	33.3	(0.8 - 90.6)
Family planning services according to SMI standard	1	100	(2.5 - 100)	3	33.3	(0.8 - 90.6)

* Three-month stock only evaluated for condoms, pills, and injectables at baseline evaluation.

† Three-month stock data unavailable for some facilities at baseline.

Table B5.7: Family planning procedures and surgeries, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Doctor trained in IUD insertion	-	-	-	8	62.5	(24.5 - 91.5)
Nurse trained in IUD insertion	-	-	-	8	87.5	(47.3 - 99.7)
Doctor trained in implant insertion	-	-	-	8	50.0	(15.7 - 84.3)
Nurse trained in implant insertion	-	-	-	8	50.0	(15.7 - 84.3)
Doctor trained in tubal ligation	7	0	(0 - 41)	8	12.5	(0.3 - 52.7)
Doctor trained in vasectomy	7	0	(0 - 41)	8	12.5	(0.3 - 52.7)

* IUD/implant insertion training data not captured at baseline.

Table B5.8: Family planning procedures and surgeries, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Doctor trained in IUD insertion	-	-	-	3	100.0	(29.2 - 100)
Nurse trained in IUD insertion	-	-	-	3	100.0	(29.2 - 100)
Doctor trained in implant insertion	-	-	-	3	100.0	(29.2 - 100)
Nurse trained in implant insertion	-	-	-	3	100.0	(29.2 - 100)
Doctor trained in tubal ligation	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Doctor trained in vasectomy	1	100	(2.5 - 100)	3	66.7	(9.4 - 99.2)

* IUD/implant insertion training data not captured at baseline.

Table B6.1: Antenatal care service provision, ambulatory comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Offers antenatal care services	21	90.5	(69.6 - 98.8)	19	100.0	(82.4 - 100)
Antenatal care area						
Visual and auditory privacy	20	35.0	(15.4 - 59.2)	19	94.7	(74 - 99.9)
Visual privacy only	20	65.0	(40.8 - 84.6)	19	5.3	(0.1 - 26)
Non private area	20	0.0	(0 - 16.8)	19	0.0	(0 - 17.6)
Do not provide service	20	0.0	(0 - 16.8)	19	0.0	(0 - 17.6)

* Antenatal care area data missing for one facility at baseline.

Table B6.2: Antenatal care service provision, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Offers antenatal care services	7	100.0	(59 - 100)	8	100.0	(63.1 - 100)
Offers (non-urgent) delivery services	7	100.0	(59 - 100)	8	87.5	(47.3 - 99.7)
Antenatal care area						
Visual and auditory privacy	7	28.6	(3.7 - 71)	8	100.0	(63.1 - 100)
Visual privacy only	7	57.1	(18.4 - 90.1)	8	0.0	(0 - 36.9)
Non private area	7	14.3	(0.4 - 57.9)	8	0.0	(0 - 36.9)
Do not provide service	7	0.0	(0 - 41)	8	0.0	(0 - 36.9)
Delivery area						
Visual and auditory privacy	7	57.1	(18.4 - 90.1)	8	100.0	(63.1 - 100)
Visual privacy only	7	42.9	(9.9 - 81.6)	8	0.0	(0 - 36.9)
Non private area	7	0.0	(0 - 41)	8	0.0	(0 - 36.9)
Do not provide service	7	0.0	(0 - 41)	8	0.0	(0 - 36.9)

Table B6.3: Antenatal care service provision, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Offers antenatal care services	1	100	(2.5 - 100)	3	100	(29.2 - 100)
Offers (non-urgent) delivery services	1	100	(2.5 - 100)	3	100	(29.2 - 100)
Antenatal care area						
Visual and auditory privacy	1	100	(2.5 - 100)	3	100	(29.2 - 100)
Visual privacy only	1	0	(0 - 97.5)	3	0	(0 - 70.8)
Non private area	1	0	(0 - 97.5)	3	0	(0 - 70.8)
Do not provide service	1	0	(0 - 97.5)	3	0	(0 - 70.8)
Delivery area						
Visual and auditory privacy	1	100	(2.5 - 100)	3	100	(29.2 - 100)
Visual privacy only	1	0	(0 - 97.5)	3	0	(0 - 70.8)
Non private area	1	0	(0 - 97.5)	3	0	(0 - 70.8)
Do not provide service	1	0	(0 - 97.5)	3	0	(0 - 70.8)

Table B6.4: Antenatal/postnatal care equipment observed and functional, ambulatory comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Scale with measuring rod	20	80	(56.3 - 94.3)	19	100.0	(82.4 - 100)
Gynecological exam table	20	80	(56.3 - 94.3)	19	84.2	(60.4 - 96.6)
CLAP obstetric tape / measuring tape	20	60	(36.1 - 80.9)	19	89.5	(66.9 - 98.7)
Lamp	20	45	(23.1 - 68.5)	19	94.7	(74 - 99.9)
Sphygmomanometer	20	70	(45.7 - 88.1)	19	100.0	(82.4 - 100)
Stethoscope	20	85	(62.1 - 96.8)	19	100.0	(82.4 - 100)
Perinatal maternal medical history form	20	95	(75.1 - 99.9)	19	100.0	(82.4 - 100)
Glycemia test	-	-	-	19	10.5	(1.3 - 33.1)
All ANC equipment observed and functioning	20	20	(5.7 - 43.7)	19	73.7	(48.8 - 90.9)

* Stretcher is used as an alternative to gynecological exam table for ambulatory facilities without a doctor.

† Glycemia test only required at facilities with a doctor.

Table B6.5: Antenatal/postnatal care equipment observed and functional, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Scale with measuring rod	7	71.4	(29 - 96.3)	8	100.0	(63.1 - 100)
Gynecological exam table	7	85.7	(42.1 - 99.6)	8	62.5	(24.5 - 91.5)
CLAP obstetric tape / measuring tape	7	71.4	(29 - 96.3)	8	100.0	(63.1 - 100)
Lamp	7	71.4	(29 - 96.3)	8	100.0	(63.1 - 100)
Sphygmomanometer	7	100.0	(59 - 100)	8	100.0	(63.1 - 100)
Stethoscope	7	100.0	(59 - 100)	8	100.0	(63.1 - 100)
Perinatal maternal medical history form	7	100.0	(59 - 100)	8	100.0	(63.1 - 100)
Glycemia test	-	-	-	8	25.0	(3.2 - 65.1)
All ANC equipment observed and functioning	7	14.3	(0.4 - 57.9)	8	62.5	(24.5 - 91.5)

* Glycemia test not captured for basic facilities at baseline.

Table B6.6: Antenatal/postnatal care equipment observed and functional, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Scale with measuring rod	1	100	(2.5 - 100)	3	100	(29.2 - 100)
Gynecological exam table	1	100	(2.5 - 100)	3	100	(29.2 - 100)
CLAP obstetric tape / measuring tape	1	100	(2.5 - 100)	3	100	(29.2 - 100)
Lamp	1	100	(2.5 - 100)	3	100	(29.2 - 100)
Sphygmomanometer	1	100	(2.5 - 100)	3	100	(29.2 - 100)
Stethoscope	1	100	(2.5 - 100)	3	100	(29.2 - 100)
Perinatal maternal medical history form	1	100	(2.5 - 100)	3	100	(29.2 - 100)
Perinatal maternal card	1	100	(2.5 - 100)	3	100	(29.2 - 100)
All ANC equipment observed and functioning	1	100	(2.5 - 100)	3	100	(29.2 - 100)

Table B6.7: Antenatal/postnatal care pharmacy inputs, ambulatory comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Multivitamin / iron	20	95	(75.1 - 99.9)	19	26.3	(9.1 - 51.2)
Tetanus vaccine (if vaccines stored)	11	100	(71.5 - 100)	12	83.3	(51.6 - 97.9)
All ANC drugs observed day of survey	20	95	(75.1 - 99.9)	19	26.3	(9.1 - 51.2)
All ANC drugs continuously available in past three months	20	95	(75.1 - 99.9)	19	15.8	(3.4 - 39.6)

Table B6.8: Antenatal/postnatal care pharmacy inputs, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Multivitamin / iron	7	100.0	(59 - 100)	8	62.5	(24.5 - 91.5)
Tetanus vaccine (if vaccines stored)	7	100.0	(59 - 100)	8	87.5	(47.3 - 99.7)
All ANC drugs observed day of survey	7	100.0	(59 - 100)	8	50.0	(15.7 - 84.3)
All ANC drugs continuously available in past three months	7	85.7	(42.1 - 99.6)	8	37.5	(8.5 - 75.5)

Table B6.9: Antenatal/postnatal care pharmacy inputs, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Multivitamin / iron	1	100	(2.5 - 100)	3	66.7	(9.4 - 99.2)
Tetanus vaccine (if vaccines stored)	1	100	(2.5 - 100)	1	100.0	(2.5 - 100)
All ANC drugs observed day of survey	1	100	(2.5 - 100)	3	66.7	(9.4 - 99.2)
All ANC drugs continuously available in past three months	1	100	(2.5 - 100)	3	33.3	(0.8 - 90.6)

Table B6.10: Antenatal/postnatal care lab inputs, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Hematological equipment	4	0	(0 - 60.2)	7	14.3	(0.4 - 57.9)
Blood chemistry equipment + reagents / glucometer + reagents	-	-	-	7	42.9	(9.9 - 81.6)
Sharps disposal	-	-	-	7	85.7	(42.1 - 99.6)
All lab inputs observed	4	0	(0 - 60.2)	7	14.3	(0.4 - 57.9)

* Blood chemistry/reagents/glucometer/sharps disposal data not captured for basic facilities at baseline.

Table B6.11: Antenatal/postnatal care lab inputs, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Hematological equipment	-	-	-	2	100	(15.8 - 100)
Blood chemistry equipment	-	-	-	2	100	(15.8 - 100)
Blood chemistry reagents	-	-	-	2	100	(15.8 - 100)
Prothrombine and thromboplastin tests	-	-	-	2	100	(15.8 - 100)
Ptt and tpt reagents	-	-	-	2	100	(15.8 - 100)
Syphillis test	-	-	-	2	100	(15.8 - 100)
HIV test	-	-	-	2	100	(15.8 - 100)
All lab inputs observed	-	-	-	2	100	(15.8 - 100)

* Lab data not captured for complete facilities at baseline.

Table B6.12: Antenatal/postnatal care composite indicator, ambulatory comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
All equipment observed and functional	20	20	(5.7 - 43.7)	19	73.7	(48.8 - 90.9)
All drugs observed on the day of survey	20	95	(75.1 - 99.9)	19	26.3	(9.1 - 51.2)
All drugs continuously available in prior three months	20	95	(75.1 - 99.9)	19	15.8	(3.4 - 39.6)
Antenatal care provided according to SMI standards	20	20	(5.7 - 43.7)	19	10.5	(1.3 - 33.1)

Table B6.13: Antenatal/postnatal care composite indicator, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
All equipment observed and functional	7	14.3	(0.4 - 57.9)	8	62.5	(24.5 - 91.5)
All drugs observed on the day of survey	7	100.0	(59 - 100)	8	50.0	(15.7 - 84.3)
All drugs continuously available in prior three months	7	85.7	(42.1 - 99.6)	8	37.5	(8.5 - 75.5)
All lab inputs observed day of survey	4	0.0	(0 - 60.2)	7	14.3	(0.4 - 57.9)
Antenatal care provided according to SMI standards	7	0.0	(0 - 41)	8	0.0	(0 - 36.9)

Table B6.14: Antenatal/postnatal care composite indicator, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
All equipment observed and functional	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
All drugs observed on the day of survey	1	100	(2.5 - 100)	3	66.7	(9.4 - 99.2)
All drugs continuously available in prior three months	1	100	(2.5 - 100)	3	33.3	(0.8 - 90.6)
All lab inputs observed day of survey	-	-	-	2	100.0	(15.8 - 100)
Antenatal care provided according to SMI standards	1	100	(2.5 - 100)	3	33.3	(0.8 - 90.6)

Table B6.15: Timely first ANC visit, ambulatory comparison facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
First ANC visit within 12 weeks	18	5.6	(0.1 - 27.3)	178	16.3	(11.2 - 22.6)

Figure B6.1: Histogram comparison of first ANC visit, by collection period

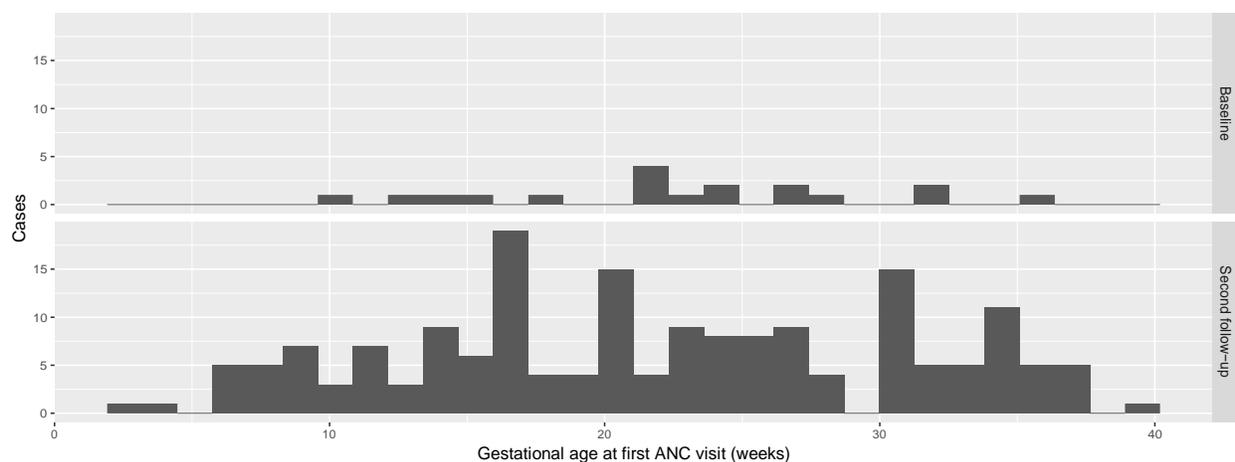


Table B6.16: At least four antenatal care visits to standard, ambulatory comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
At least four ANC visits	23	34.8	(16.4 - 57.3)	188	11.7	(7.5 - 17.2)
All appropriate checks performed, at least four ANC visits	23	21.7	(7.5 - 43.7)	188	1.1	(0.1 - 3.8)
All lab tests performed at least once during pregnancy:	23	8.7	(1.1 - 28)	188	0.0	(0 - 1.9)
Blood group	23	8.7	(1.1 - 28)	188	0.0	(0 - 1.9)
Rh factor	23	8.7	(1.1 - 28)	188	0.0	(0 - 1.9)
Blood glucose	23	13.0	(2.8 - 33.6)	188	8.0	(4.5 - 12.8)
HIV test	23	17.4	(5 - 38.8)	188	7.4	(4.1 - 12.2)
Hemoglobin	23	13.0	(2.8 - 33.6)	188	5.3	(2.6 - 9.6)
Urinalysis	23	17.4	(5 - 38.8)	188	5.3	(2.6 - 9.6)
Antenatal care performed according to standard	23	8.7	(1.1 - 28)	188	0.0	(0 - 1.9)

Table B6.17: Partograph revision, basic comparison facilities

	Second Follow-Up		
	N	%	CI
Patient arrived in imminent birth or elective C-section (no partograph included)	26	0	(0 - 13.2)
Partograph included and filled out (regardless of delivery type)	26	100	(86.8 - 100)
If partograph filled out:			
Fetal heart rate and alert curve recorded (if dilation > 4.5 cm)	-	-	-
Note written within 30 minutes if fetal heart rate < 120 bpm	-	-	-
Note written within 30 minutes if alert curve surpassed	-	-	-
Partograph filled according to standard	26	100	(86.8 - 100)

Table B6.18: Partograph revision, complete comparison facilities

	Second Follow-Up		
	N	%	CI
Patient arrived in imminent birth or elective C-section (no partograph included)	60	0.0	(0 - 6)
Partograph included and filled out (regardless of delivery type)	60	100.0	(94 - 100)
If partograph filled out:			
Fetal heart rate and alert curve recorded (if dilation > 4.5 cm)	15	93.3	(68.1 - 99.8)
Note written within 30 minutes if fetal heart rate < 120 bpm	1	0.0	(0 - 97.5)
Note written within 30 minutes if alert curve surpassed	12	0.0	(0 - 26.5)
Partograph filled according to standard	60	78.3	(65.8 - 87.9)

Figure B6.2: Partograph completion at the second follow-up evaluation

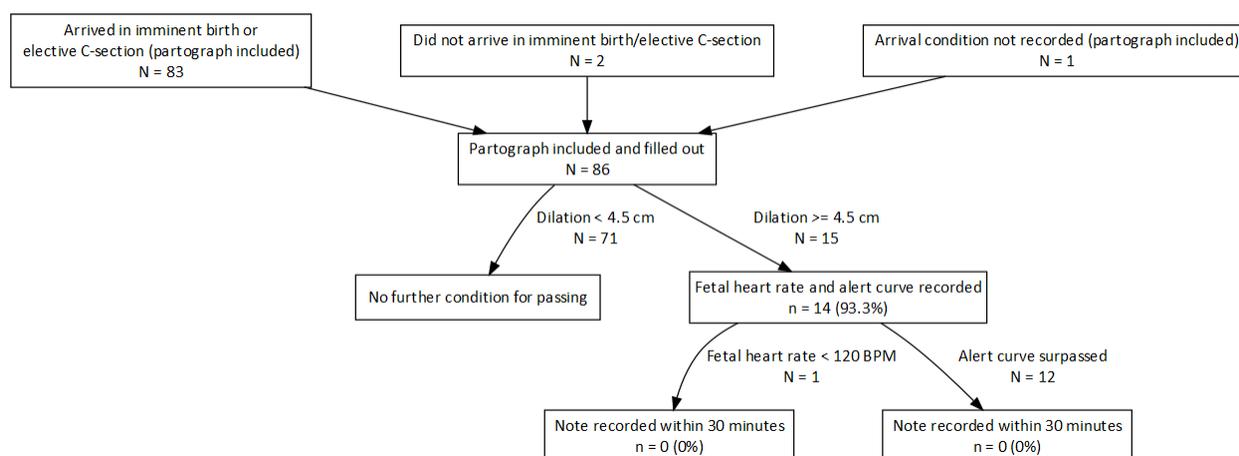


Table B6.19: Delivery management, basic comparison facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Attended by doctor/nurse/obstetrician/midwife	38	89.5	(75.2 - 97.1)	53	98.1	(89.9 - 100)
Oxytocin or other uterotonic administered	38	100.0	(90.7 - 100)	53	98.1	(89.9 - 100)
Partograph included in file	38	50.0	(33.4 - 66.6)	53	92.5	(81.8 - 97.9)
Cord clamping for appropriate time	38	89.5	(75.2 - 97.1)	53	96.2	(87 - 99.5)
Delivery managed to standard	38	44.7	(28.6 - 61.7)	53	88.7	(77 - 95.7)

* At baseline and first follow-up, cord clamping time was defined at 90 seconds. At the second follow-up, it is between 2-3 minutes.

Table B6.20: Immediate maternal postpartum care, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Checked 4 times in first hour, twice in second hour, once at discharge:						
Blood pressure	40	30	(16.6 - 46.5)	73	20.5	(12 - 31.6)
Temperature	40	30	(16.6 - 46.5)	73	12.3	(5.8 - 22.1)
Heart rate / pulse	40	30	(16.6 - 46.5)	73	17.8	(9.8 - 28.5)
Postpartum care to standard	40	30	(16.6 - 46.5)	73	12.3	(5.8 - 22.1)

* Heart rate not captured as pulse alternative at baseline.

Table B6.21: Immediate maternal postpartum care, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Checked 4 times in first hour, twice in second hour, once at discharge:						
Blood pressure	7	0	(0 - 41)	47	61.7	(46.4 - 75.5)
Temperature	7	0	(0 - 41)	47	59.6	(44.3 - 73.6)
Heart rate / pulse	7	0	(0 - 41)	47	57.4	(42.2 - 71.7)
Postpartum care to standard	7	0	(0 - 41)	47	55.3	(40.1 - 69.8)

* Heart rate not captured as pulse alternative at baseline.

Table B7.1: Emergency care services provision, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Emergency care area						
Visual and auditory privacy	7	57.1	(18.4 - 90.1)	8	75.0	(34.9 - 96.8)
Visual privacy only	7	28.6	(3.7 - 71)	8	0.0	(0 - 36.9)
Non private area	7	14.3	(0.4 - 57.9)	8	12.5	(0.3 - 52.7)
Other	7	0.0	(0 - 41)	8	0.0	(0 - 36.9)
Do not provide service	7	0.0	(0 - 41)	8	12.5	(0.3 - 52.7)

Table B7.2: Emergency care services provision, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Emergency care area						
Visual and auditory privacy	1	100	(2.5 - 100)	3	100	(29.2 - 100)
Visual privacy only	1	0	(0 - 97.5)	3	0	(0 - 70.8)
Non private area	1	0	(0 - 97.5)	3	0	(0 - 70.8)
Other	1	0	(0 - 97.5)	3	0	(0 - 70.8)
Do not provide service	1	0	(0 - 97.5)	3	0	(0 - 70.8)

Table B7.3: Emergency care equipment, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Blood pressure apparatus	7	42.9	(9.9 - 81.6)	7	71.4	(29 - 96.3)
Stethoscope	7	28.6	(3.7 - 71)	7	85.7	(42.1 - 99.6)
Pinard stethoscope / portable doppler	7	42.9	(9.9 - 81.6)	7	85.7	(42.1 - 99.6)
Heat sterilizer / autoclave	7	71.4	(29 - 96.3)	7	57.1	(18.4 - 90.1)
Oxygen tank	7	42.9	(9.9 - 81.6)	7	57.1	(18.4 - 90.1)
Adult resuscitation bag	7	57.1	(18.4 - 90.1)	7	85.7	(42.1 - 99.6)
Neonate resuscitation bag	7	57.1	(18.4 - 90.1)	7	71.4	(29 - 96.3)
Laryngoscope	7	28.6	(3.7 - 71)	7	28.6	(3.7 - 71)
MVA (not required at CAPs)	7	0.0	(0 - 41)	7	71.4	(29 - 96.3)
All emergency equipment observed and functional	7	0.0	(0 - 41)	7	28.6	(3.7 - 71)

Table B7.4: Emergency care equipment, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Blood pressure apparatus	1	100	(2.5 - 100)	3	100	(29.2 - 100)
Stethoscope	1	0	(0 - 97.5)	3	100	(29.2 - 100)
Pinard stethoscope / portable doppler	1	0	(0 - 97.5)	3	100	(29.2 - 100)
Heat sterilizer / autoclave	1	100	(2.5 - 100)	3	100	(29.2 - 100)
Oxygen tank	1	100	(2.5 - 100)	3	100	(29.2 - 100)
Adult resuscitation bag	1	100	(2.5 - 100)	3	100	(29.2 - 100)
Neonate resuscitation bag	1	100	(2.5 - 100)	3	100	(29.2 - 100)
Laryngoscope	1	100	(2.5 - 100)	3	100	(29.2 - 100)
MVA / uterine curettage kit	1	100	(2.5 - 100)	3	100	(29.2 - 100)
Anesthesia equipment	1	100	(2.5 - 100)	3	100	(29.2 - 100)
C-section equipment	1	0	(0 - 97.5)	3	100	(29.2 - 100)
Pediatric / neonatal stethoscope	1	0	(0 - 97.5)	3	100	(29.2 - 100)
All emergency equipment observed and functional	1	0	(0 - 97.5)	3	100	(29.2 - 100)

Table B7.5: Emergency care pharmacy inputs, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Oxytocin / methylergonovine	7	85.7	(42.1 - 99.6)	7	100.0	(59 - 100)
Gentamicin / amikacin	7	57.1	(18.4 - 90.1)	7	100.0	(59 - 100)
Dexamethasone / betamethasone	7	57.1	(18.4 - 90.1)	7	100.0	(59 - 100)
Metronidazole / clindamycin	7	71.4	(29 - 96.3)	7	85.7	(42.1 - 99.6)
Magnesium sulfate	7	42.9	(9.9 - 81.6)	7	85.7	(42.1 - 99.6)
Calcium gluconate	7	14.3	(0.4 - 57.9)	7	28.6	(3.7 - 71)
Hydralazine	7	28.6	(3.7 - 71)	7	42.9	(9.9 - 81.6)
Ampicillin / penicillin	7	71.4	(29 - 96.3)	7	85.7	(42.1 - 99.6)
All drugs observed day of evaluation	7	14.3	(0.4 - 57.9)	7	14.3	(0.4 - 57.9)
All drugs continuously available in past 3 months	7	0.0	(0 - 41)	7	0.0	(0 - 41)

* Stockout data not available for metronidazole, clindamycin, or calcium gluconate at baseline evaluation.

Table B7.6: Emergency care pharmacy inputs, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Oxytocin / methylergonovine	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Gentamicin / amikacin	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Dexamethasone / betamethasone	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Metronidazole / clindamycin	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Magnesium sulfate	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Calcium gluconate	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Hydralazine hydrochloride	1	100	(2.5 - 100)	3	33.3	(0.8 - 90.6)
Ampicillin / crystal benzylpenicillin / penicillin / chloramphenicol	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Ceftriaxone	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Nifedipine	1	100	(2.5 - 100)	3	66.7	(9.4 - 99.2)
Diazepam	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)
Diphenhydramine	1	0	(0 - 97.5)	3	100.0	(29.2 - 100)
All drugs observed day of evaluation	1	0	(0 - 97.5)	3	33.3	(0.8 - 90.6)
All drugs continuously available in past 3 months	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)

* Stockout data not available for metronidazole, clindamycin, calcium gluconate, hydralazine hydrochloride, ceftriaxone, nifedipine, and diphenhydramine at baseline evaluation.

† Stockout data not available for hydralazine hydrochloride at first follow-up evaluation.

Table B7.7: Emergency care composite indicator, basic comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
All equipment observed and functional	7	0.0	(0 - 41)	7	28.6	(3.7 - 71)
All drugs observed on the day of survey	7	14.3	(0.4 - 57.9)	7	14.3	(0.4 - 57.9)
All drugs continuously available in prior three months	7	0.0	(0 - 41)	7	0.0	(0 - 41)
Emergency care provided according to SMI standards	7	0.0	(0 - 41)	7	0.0	(0 - 41)

Table B7.8: Emergency care composite indicator, complete comparison facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
All equipment observed and functional	1	0	(0 - 97.5)	3	100.0	(29.2 - 100)
All drugs observed on the day of survey	1	0	(0 - 97.5)	3	33.3	(0.8 - 90.6)
All drugs continuously available in prior three months	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)
Emergency care provided according to SMI standards	1	0	(0 - 97.5)	3	0.0	(0 - 70.8)

Table B7.9: Uterine tamponade balloon for hemorrhage management, second follow-up evaluation

	Basic comparison facilities			Complete comparison facilities		
	N	%	CI	N	%	CI
Facility uses tamponade to manage obstetric hemorrhage	7	14.3	(0.4 - 57.9)	3	100.0	(29.2 - 100)
Type						
Bakri	1	100.0	(2.5 - 100)	3	0.0	(0 - 70.8)
Foley catheter	1	0.0	(0 - 97.5)	3	33.3	(0.8 - 90.6)
Condom-based balloon	1	0.0	(0 - 97.5)	3	33.3	(0.8 - 90.6)
None of these	1	0.0	(0 - 97.5)	3	0.0	(0 - 70.8)
Do not know/did not respond	1	0.0	(0 - 97.5)	3	33.3	(0.8 - 90.6)
Assembly kit						
Facility has tamponade kit	1	100.0	(2.5 - 100)	2	0.0	(0 - 84.2)
Kit commercially assembled	1	0.0	(0 - 97.5)	-	-	-
Kit prepared from available materials	1	100.0	(2.5 - 100)	-	-	-
Do not know / did not respond (kit type)	1	0.0	(0 - 97.5)	-	-	-
Staff training						
Staff trained in tamponade use	8	100.0	(63.1 - 100)	3	100.0	(29.2 - 100)
Staff trained in tamponade assembly	7	85.7	(42.1 - 99.6)	3	100.0	(29.2 - 100)

* One basic facility responded 'do not know' to tamponade use and was omitted.

† One basic facility responded 'do not know' to staff trained in assembly and was omitted.

‡ One complete facility responded 'do not know' to kit assembly and was omitted.

Table B7.10: Distribution of obstetric complications, basic comparison facilities

	Second Follow-up
Sepsis	0
Hemorrhage	17
Pre-eclampsia	13
Eclampsia	1

* No baseline records available.

Table B7.11: Distribution of obstetric complications, complete comparison facilities

	Baseline	Second Follow-up
Sepsis	4	0
Hemorrhage	28	27
Pre-eclampsia	7	19
Eclampsia	4	2

Table B7.12: Distribution of neonatal complications, basic comparison facilities

	Second Follow-up
Sepsis	5
Low birth weight	2
Asphyxia	1
Prematurity	1

* No baseline records available.

Table B7.13: Distribution of neonatal complications, complete comparison facilities

	Baseline	Second Follow-up
Sepsis	11	20
Low birth weight	0	18
Asphyxia	16	22
Prematurity	15	24

No obstetric sepsis cases from basic comparison facilities.

Table B7.14: Obstetric sepsis management, complete comparison facilities

	Baseline		
	N	%	CI
Vital signs	4	75	(19.4 - 99.4)
Pulse / heart rate	4	75	(19.4 - 99.4)
Blood pressure	4	100	(39.8 - 100)
Temperature	4	100	(39.8 - 100)
Complete blood count	4	50	(6.8 - 93.2)
Appropriate treatment:	2	100	(15.8 - 100)
Pelvic abscess	-	-	-
Endometritis	1	100	(2.5 - 100)
Puerperal fever	1	100	(2.5 - 100)
Placental retention	1	100	(2.5 - 100)
Sepsis management to standard	4	50	(6.8 - 93.2)

* No second follow-up records available.

Table B7.15: Obstetric hemorrhage management, basic comparison facilities

	Second Follow-Up		
	N	%	CI
Vital signs	17	82.4	(56.6 - 96.2)
Pulse / heart rate	17	82.4	(56.6 - 96.2)
Blood pressure	17	88.2	(63.6 - 98.5)
Ringers lactate/Hartmann's solution/saline	17	88.2	(63.6 - 98.5)
Appropriate treatment:	16	87.5	(61.7 - 98.4)
Abortion	-	-	-
Ectopic pregnancy	-	-	-
Placenta previa	-	-	-
Placental detachment	-	-	-
Uterine atony	-	-	-
Uterine rupture	1	100.0	(2.5 - 100)
Uterine inversion	-	-	-
Retention of placental remains	15	86.7	(59.5 - 98.3)
Hemorrhage management to standard	17	64.7	(38.3 - 85.8)

Table B7.16: Obstetric hemorrhage management, complete comparison facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs	28	96.4	(81.7 - 99.9)	27	81.5	(61.9 - 93.7)
Pulse / heart rate	28	100.0	(87.7 - 100)	27	92.6	(75.7 - 99.1)
Blood pressure	28	96.4	(81.7 - 99.9)	27	81.5	(61.9 - 93.7)
Lab tests	28	71.4	(51.3 - 86.8)	27	85.2	(66.3 - 95.8)
Hematocrit	28	71.4	(51.3 - 86.8)	27	85.2	(66.3 - 95.8)
Hemoglobin	28	71.4	(51.3 - 86.8)	27	85.2	(66.3 - 95.8)
Platelette count	28	71.4	(51.3 - 86.8)	27	85.2	(66.3 - 95.8)
Ringers lactate/Hartmann's solution/saline	28	75.0	(55.1 - 89.3)	27	81.5	(61.9 - 93.7)
Appropriate treatment:	28	57.1	(37.2 - 75.5)	25	44.0	(24.4 - 65.1)
Abortion	2	100.0	(15.8 - 100)	3	100.0	(29.2 - 100)
Ectopic pregnancy	-	-	-	-	-	-
Placenta previa	-	-	-	1	0.0	(0 - 97.5)
Placental detachment	1	100.0	(2.5 - 100)	-	-	-
Uterine atony	2	0.0	(0 - 84.2)	-	-	-
Uterine rupture	-	-	-	2	50.0	(1.3 - 98.7)
Uterine inversion	-	-	-	-	-	-
Retention of placental remains	22	59.1	(36.4 - 79.3)	19	36.8	(16.3 - 61.6)
Hemorrhage management to standard	28	28.6	(13.2 - 48.7)	27	33.3	(16.5 - 54)

Table B7.17: Maternal pre-eclampsia management, basic comparison facilities

	Second Follow-Up		
	N	%	CI
Vital signs	13	92.3	(64 - 99.8)
Pulse / heart rate	13	61.5	(31.6 - 86.1)
Lab tests	13	15.4	(1.9 - 45.4)
Urine protein	13	15.4	(1.9 - 45.4)
Medication administered	13	38.5	(13.9 - 68.4)
Magnesium sulfate	13	100.0	(75.3 - 100)
Ringers lactate/Hartmann's solution/saline	13	38.5	(13.9 - 68.4)
Referred to complete	13	61.5	(31.6 - 86.1)
Pre-eclampsia management to standard	13	0.0	(0 - 24.7)

Table B7.18: Maternal pre-eclampsia management, complete comparison facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs	7	0.0	(0 - 41)	19	10.5	(1.3 - 33.1)
Respiratory rate	7	71.4	(29 - 96.3)	19	84.2	(60.4 - 96.6)
Pulse / heart rate	7	85.7	(42.1 - 99.6)	19	100.0	(82.4 - 100)
Blood pressure	7	100.0	(59 - 100)	19	100.0	(82.4 - 100)
Patellar reflex	7	0.0	(0 - 41)	19	10.5	(1.3 - 33.1)
Lab tests	7	0.0	(0 - 41)	19	5.3	(0.1 - 26)
Urine protein	7	0.0	(0 - 41)	19	26.3	(9.1 - 51.2)
Platelets	7	14.3	(0.4 - 57.9)	19	100.0	(82.4 - 100)
Creatinine	7	14.3	(0.4 - 57.9)	19	84.2	(60.4 - 96.6)
Uric acid	7	14.3	(0.4 - 57.9)	19	57.9	(33.5 - 79.7)
Aspartate aminotransferase / glutamate oxaloacetate transaminase	7	14.3	(0.4 - 57.9)	19	78.9	(54.4 - 93.9)
Alanine aminotransferase / glutamate-pyruvate transaminase	7	14.3	(0.4 - 57.9)	19	78.9	(54.4 - 93.9)
Lactate dehydrogenase	7	0.0	(0 - 41)	19	10.5	(1.3 - 33.1)
Medication administered	7	0.0	(0 - 41)	19	5.3	(0.1 - 26)
Magnesium sulfate	7	71.4	(29 - 96.3)	19	94.7	(74 - 99.9)
Hydralazine / nifedipine (if sist. \geq 160 or dias. \geq 110)	-	-	-	1	100.0	(2.5 - 100)
Dexamethasone / betamethasone (if gest age 24-35 weeks)	7	0.0	(0 - 41)	18	0.0	(0 - 18.5)
Pre-eclampsia management to standard	7	0.0	(0 - 41)	19	0.0	(0 - 17.6)

Table B7.19: Maternal eclampsia management, basic comparison facilities

	Second Follow-Up		
	N	%	CI
Vital signs	1	100	(2.5 - 100)
Pulse / heart rate	1	100	(2.5 - 100)
Lab tests	1	100	(2.5 - 100)
Urine protein	1	100	(2.5 - 100)
Medication administered	1	100	(2.5 - 100)
Magnesium sulfate	1	100	(2.5 - 100)
Ringers lactate/Hartmann's solution/saline	1	100	(2.5 - 100)
Referred to complete	1	0	(0 - 97.5)
Pre-eclampsia management to standard	1	0	(0 - 97.5)

Table B7.20: Maternal eclampsia management, complete comparison facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs	4	0	(0 - 60.2)	2	0	(0 - 84.2)
Respiratory rate	4	100	(39.8 - 100)	2	0	(0 - 84.2)
Pulse / heart rate	4	100	(39.8 - 100)	2	50	(1.3 - 98.7)
Blood pressure	4	100	(39.8 - 100)	2	50	(1.3 - 98.7)
Patellar reflex	4	0	(0 - 60.2)	2	0	(0 - 84.2)
Lab tests	4	0	(0 - 60.2)	2	0	(0 - 84.2)
Urine protein	4	0	(0 - 60.2)	2	0	(0 - 84.2)
Platelets	4	50	(6.8 - 93.2)	2	100	(15.8 - 100)
Creatinine	4	0	(0 - 60.2)	2	50	(1.3 - 98.7)
Uric acid	4	0	(0 - 60.2)	2	0	(0 - 84.2)
Aspartate aminotransferase / glutamate oxaloacetate transaminase	4	0	(0 - 60.2)	2	50	(1.3 - 98.7)
Alanine aminotransferase / glutamate-pyruvate transaminase	4	0	(0 - 60.2)	2	50	(1.3 - 98.7)
Lactate dehydrogenase	4	0	(0 - 60.2)	2	0	(0 - 84.2)
Medication administered	4	0	(0 - 60.2)	2	0	(0 - 84.2)
Magnesium sulfate	4	75	(19.4 - 99.4)	2	100	(15.8 - 100)
Hydralazine / nifedipine (if sist. >= 160 or dias. >= 110)	2	100	(15.8 - 100)	-	-	-
Dexamethasone / betamethasone (if gest age 24-35 weeks)	4	0	(0 - 60.2)	2	0	(0 - 84.2)
Pre-eclampsia management to standard	4	0	(0 - 60.2)	2	0	(0 - 84.2)

Table B7.21: Obstetric complications management, basic comparison facilities

	Second Follow-Up		
	N	%	CI
Sepsis managed according to SMI standard	-	-	-
Hemorrhage managed according to SMI standard	17	64.7	(38.3 - 85.8)
Pre-eclampsia managed according to SMI standard	13	0.0	(0 - 24.7)
Eclampsia managed according to SMI standard	1	0.0	(0 - 97.5)
Complications managed according to SMI standard	31	35.5	(19.2 - 54.6)

Table B7.22: Obstetric complications management, complete comparison facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Sepsis managed according to SMI standard	4	50.0	(6.8 - 93.2)	-	-	-
Hemorrhage managed according to SMI standard	28	28.6	(13.2 - 48.7)	27	33.3	(16.5 - 54)
Pre-eclampsia managed according to SMI standard	7	0.0	(0 - 41)	19	0.0	(0 - 17.6)
Eclampsia managed according to SMI standard	4	0.0	(0 - 60.2)	2	0.0	(0 - 84.2)
Complications managed according to SMI standard	43	23.3	(11.8 - 38.6)	48	18.8	(8.9 - 32.6)

Table B7.23: Neonatal sepsis management, basic comparison facilities

	Second Follow-Up		
	N	%	CI
Vital signs checked	5	0	(0 - 52.2)
Pulse / heart rate	5	0	(0 - 52.2)
Respiratory rate	5	0	(0 - 52.2)
Temperature	5	0	(0 - 52.2)
Antibiotics administered	5	0	(0 - 52.2)
Evaluated by doctor or nurse	5	0	(0 - 52.2)
Referred to complete facility	5	100	(47.8 - 100)
Sepsis treated according to standard	5	0	(0 - 52.2)

Table B7.24: Neonatal sepsis management, complete comparison facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	11	63.6	(30.8 - 89.1)	20	55	(31.5 - 76.9)
Pulse / heart rate	11	72.7	(39 - 94)	20	85	(62.1 - 96.8)
Respiratory rate	11	63.6	(30.8 - 89.1)	20	65	(40.8 - 84.6)
Temperature	11	90.9	(58.7 - 99.8)	20	95	(75.1 - 99.9)
Lab tests performed	11	0.0	(0 - 28.5)	20	0	(0 - 16.8)
Oxygen saturation	11	9.1	(0.2 - 41.3)	20	15	(3.2 - 37.9)
Blood biometry	11	36.4	(10.9 - 69.2)	20	60	(36.1 - 80.9)
Hemoculture	11	0.0	(0 - 28.5)	20	0	(0 - 16.8)
C-reactive protein	11	27.3	(6 - 61)	20	55	(31.5 - 76.9)
Antibiotics administered	11	100.0	(71.5 - 100)	20	95	(75.1 - 99.9)
Evaluated by specialist	11	81.8	(48.2 - 97.7)	20	55	(31.5 - 76.9)
Sepsis treated according to standard	11	0.0	(0 - 28.5)	20	0	(0 - 16.8)

Table B7.25: Neonatal asphyxia management, basic comparison facilities

	Second Follow-Up		
	N	%	CI
Vital signs checked	1	0	(0 - 97.5)
Pulse / heart rate	1	0	(0 - 97.5)
Respiratory rate	1	0	(0 - 97.5)
APGAR score at 1 minute	1	100	(2.5 - 100)
APGAR score at 5 minutes	1	100	(2.5 - 100)
Heat application	1	0	(0 - 97.5)
Evaluated by doctor or nurse	1	0	(0 - 97.5)
Oxygen application (if severe)	-	-	-
Referred to complete facility (if severe)	-	-	-
Asphyxia treated according to standard	1	0	(0 - 97.5)

Table B7.26: Neonatal asphyxia management, complete comparison facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	16	56.2	(29.9 - 80.2)	22	68.2	(45.1 - 86.1)
Pulse / heart rate	16	81.2	(54.4 - 96)	22	90.9	(70.8 - 98.9)
Respiratory rate	16	62.5	(35.4 - 84.8)	22	72.7	(49.8 - 89.3)
APGAR score at 1 minute	16	75.0	(47.6 - 92.7)	22	100.0	(84.6 - 100)
APGAR score at 5 minutes	16	81.2	(54.4 - 96)	22	100.0	(84.6 - 100)
Oxygen saturation lab test	16	75.0	(47.6 - 92.7)	22	36.4	(17.2 - 59.3)
Heat application	16	100.0	(79.4 - 100)	22	100.0	(84.6 - 100)
Evaluated by doctor or nurse	16	100.0	(79.4 - 100)	22	90.9	(70.8 - 98.9)
Evaluated by specialist	16	100.0	(79.4 - 100)	22	90.9	(70.8 - 98.9)
Oxygen application (if severe)	-	-	-	-	-	-
Other procedures (if severe)	-	-	-	-	-	-
Referred to complete facility (if severe)	-	-	-	-	-	-
Asphyxia treated according to standard	16	37.5	(15.2 - 64.6)	22	22.7	(7.8 - 45.4)

Table B7.27: Neonatal low birth weight management, basic comparison facilities

	Second Follow-Up		
	N	%	CI
Gestational age calculated using Capurro/Ballard	2	100	(15.8 - 100)
Classification based on gestational age	2	100	(15.8 - 100)
Vital signs checked	2	0	(0 - 84.2)
Pulse / heart rate	2	0	(0 - 84.2)
Respiratory rate	2	50	(1.3 - 98.7)
Weight	2	100	(15.8 - 100)
Silverman score	2	50	(1.3 - 98.7)
Head circumference	2	100	(15.8 - 100)
APGAR at 1 or 5 minutes	2	100	(15.8 - 100)
Heat application	2	50	(1.3 - 98.7)
Fed glucose	2	100	(15.8 - 100)
Evaluated by doctor or nurse	2	50	(1.3 - 98.7)
Referred to complete facility (if gest age <=34 weeks or complications)	-	-	-
Appropriate treatment:	-	-	-
Pneumonia	-	-	-
Diarrhea	-	-	-
Hypoglycemia	-	-	-
Low birth weight treated according to standard	2	0	(0 - 84.2)

Table B7.28: Neonatal low birth weight management, complete comparison facilities

	Second Follow-Up		
	N	%	CI
Gestational age calculated using Capurro/Ballard	18	77.8	(52.4 - 93.6)
Classification based on gestational age	18	100.0	(81.5 - 100)
Vital signs checked	18	44.4	(21.5 - 69.2)
Pulse / heart rate	18	94.4	(72.7 - 99.9)
Respiratory rate	18	77.8	(52.4 - 93.6)
Weight	18	88.9	(65.3 - 98.6)
Silverman score	18	27.8	(9.7 - 53.5)
Head circumference	18	72.2	(46.5 - 90.3)
APGAR at 1 or 5 minutes	18	83.3	(58.6 - 96.4)
Lab tests performed	18	5.6	(0.1 - 27.3)
Oxygen saturation	18	5.6	(0.1 - 27.3)
Glycemia	18	27.8	(9.7 - 53.5)
Heat application	18	94.4	(72.7 - 99.9)
Fed glucose	18	77.8	(52.4 - 93.6)
Evaluated by specialist	18	50.0	(26 - 74)
Appropriate treatment:	1	100.0	(2.5 - 100)
Pneumonia	1	100.0	(2.5 - 100)
Diarrhea	-	-	-
Hypoglycemia	-	-	-
Low birth weight treated according to standard	18	0.0	(0 - 18.5)

Table B7.29: Neonatal prematurity management, basic comparison facilities

	Second Follow-Up		
	N	%	CI
Gestational age calculated using Capurro/Ballard	1	100	(2.5 - 100)
Classification based on gestational age	1	100	(2.5 - 100)
Vital signs checked	1	0	(0 - 97.5)
Pulse / heart rate	1	100	(2.5 - 100)
Respiratory rate	1	100	(2.5 - 100)
Weight	1	100	(2.5 - 100)
Silverman score	1	0	(0 - 97.5)
Head circumference	1	100	(2.5 - 100)
APGAR at 1 or 5 minutes	1	0	(0 - 97.5)
Heat application	1	0	(0 - 97.5)
Fed glucose	1	0	(0 - 97.5)
Evaluated by doctor or nurse	1	100	(2.5 - 100)
Referred to complete facility (if gest age <=34 weeks or complications)	-	-	-
Appropriate treatment:	-	-	-
Pneumonia	-	-	-
Diarrhea	-	-	-
Hypoglycemia	-	-	-
Prematurity treated according to standard	1	0	(0 - 97.5)

Table B7.30: Neonatal prematurity management, complete comparison facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Gestational age calculated using Capurro/Ballard	15	73.3	(44.9 - 92.2)	24	95.8	(78.9 - 99.9)
Classification based on gestational age	15	100.0	(78.2 - 100)	24	91.7	(73 - 99)
Vital signs checked	15	0.0	(0 - 21.8)	24	33.3	(15.6 - 55.3)
Pulse / heart rate	15	86.7	(59.5 - 98.3)	24	95.8	(78.9 - 99.9)
Respiratory rate	15	80.0	(51.9 - 95.7)	24	79.2	(57.8 - 92.9)
Weight	15	80.0	(51.9 - 95.7)	24	95.8	(78.9 - 99.9)
Silverman score	15	6.7	(0.2 - 31.9)	24	33.3	(15.6 - 55.3)
Head circumference	15	13.3	(1.7 - 40.5)	24	91.7	(73 - 99)
APGAR at 1 or 5 minutes	15	60.0	(32.3 - 83.7)	24	91.7	(73 - 99)
Lab tests performed	15	0.0	(0 - 21.8)	24	8.3	(1 - 27)
Oxygen saturation	15	0.0	(0 - 21.8)	24	16.7	(4.7 - 37.4)
Glycemia	15	13.3	(1.7 - 40.5)	24	50.0	(29.1 - 70.9)
Heat application	15	100.0	(78.2 - 100)	24	87.5	(67.6 - 97.3)
Fed glucose	15	60.0	(32.3 - 83.7)	24	58.3	(36.6 - 77.9)
Evaluated by specialist	15	86.7	(59.5 - 98.3)	24	50.0	(29.1 - 70.9)
Appropriate treatment:	3	100.0	(29.2 - 100)	1	100.0	(2.5 - 100)
Pneumonia	3	100.0	(29.2 - 100)	1	100.0	(2.5 - 100)
Diarrhea	-	-	-	-	-	-
Hypoglycemia	-	-	-	-	-	-
Prematurity treated according to standard	15	0.0	(0 - 21.8)	24	0.0	(0 - 14.2)

Table B7.31: Neonatal complications management, basic comparison facilities

	Second Follow-Up		
	N	%	CI
Sepsis managed according to SMI standard	5	0	(0 - 52.2)
Asphyxia managed according to SMI standard	1	0	(0 - 97.5)
Low birth weight managed according to SMI standard	2	0	(0 - 84.2)
Prematurity managed according to SMI standard	1	0	(0 - 97.5)
Complications managed according to SMI standard	8	0	(0 - 36.9)

Table B7.32: Neonatal complications management, complete comparison facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Sepsis managed according to SMI standard	11	0.0	(0 - 28.5)	20	0.0	(0 - 16.8)
Asphyxia managed according to SMI standard	16	37.5	(15.2 - 64.6)	22	22.7	(7.8 - 45.4)
Low birth weight managed according to SMI standard	-	-	-	18	0.0	(0 - 18.5)
Prematurity managed according to SMI standard	15	0.0	(0 - 21.8)	24	0.0	(0 - 14.2)
Complications managed according to SMI standard	42	14.3	(5.4 - 28.5)	78	6.4	(2.1 - 14.3)

Table B8.1: Infection control and disposal, ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Incinerator at facility	21	4.8	(0.1 - 23.8)	19	5.3	(0.1 - 26)
Contract with other facility for disposal (if no incinerator)	20	45.0	(23.1 - 68.5)	18	0.0	(0 - 18.5)
Manual for decontamination	20	15.0	(3.2 - 37.9)	19	21.1	(6.1 - 45.6)

Table B8.2: Infection control and disposal, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Incinerator at facility	7	0.0	(0 - 41)	8	0.0	(0 - 36.9)
Contract with other facility for disposal (if no incinerator)	7	28.6	(3.7 - 71)	8	25.0	(3.2 - 65.1)
Manual for decontamination	7	71.4	(29 - 96.3)	8	87.5	(47.3 - 99.7)

Table B8.3: Infection control and disposal, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Incinerator at facility	1	0	(0 - 97.5)	3	33.3	(0.8 - 90.6)
Contract with other facility for disposal (if no incinerator)	1	100	(2.5 - 100)	2	100.0	(15.8 - 100)
Manual for decontamination	1	100	(2.5 - 100)	3	100.0	(29.2 - 100)

Appendix C: Indicator matrices - comparison areas

Table C.1: Performance indicator matrix

Code	Description	Baseline			Second Follow-Up		
		N	%	CI	N	%	CI
4050	Immediate maternal postpartum care	47	25.5	(13.9 - 40.3)	120	29.2	(21.2 - 38.2)
4660	Delivery management	38	44.7	(28.6 - 61.7)	53	88.7	(77 - 95.7)
4070	Neonatal complications management	42	14.3	(5.4 - 28.5)	86	5.8	(1.9 - 13)
4080	Maternal complications management	43	23.3	(11.8 - 38.6)	79	25.3	(16.2 - 36.4)

Table C.2: Monitoring indicator matrix

Code	Description	Baseline			Second Follow-Up		
		N	%	CI	N	%	CI
3030	Four+ ANC visits to standard	23	8.7	(1.1 - 28)	188	0.0	(0 - 1.9)
3040	Timely first ANC visit	18	5.6	(0.1 - 27.3)	178	16.3	(11.2 - 22.6)
4060	Partograph revision	-	-	-	86	84.9	(75.5 - 91.7)
7010	Childcare services composite	27	33.3	(16.5 - 54)	29	24.1	(10.3 - 43.5)
7020	Pre/postnatal care composite	28	17.9	(6.1 - 36.9)	30	10.0	(2.1 - 26.5)
7030	Emergency care composite	8	0.0	(0 - 36.9)	10	0.0	(0 - 30.8)
7050	Family planning composite	28	75.0	(55.1 - 89.3)	30	6.7	(0.8 - 22.1)
7160	Facility data and reports	-	-	-	7	85.7	(42.1 - 99.6)
8610	Child growth and development	-	-	-	259	91.1	(87 - 94.3)

Appendix D: Combined intervention and comparison area tables

Table D2.1: Health facility classification

EONC	Baseline	Second Follow-Up
Ambulatory	68	60
Basic	20	25
Complete	5	6
Total	93	91

Table D2.2: Number of facilities by municipality

Municipality	Baseline Facilities	Second Follow-up Facilities
Chimaltenango Department		
Chimaltenango	-	1
Huehuetanango Department		
Barillas	5	6
Colotenango	2	2
Huehuetenango	1	1
San Gaspar Ixchil	1	2
San Idelfonso Ixtahuacán	2	4
San Juan Atitan	3	1
San Mateo Ixtatán	5	3
San Miguel Acatán	6	4
San Pedro Necta	2	4
San Rafael la Independencia	2	2
San Rafael Petzal	2	2
San Sebastian Coatan	2	1
San Sebastian Huehuetenango	4	3
Santa Barbara	4	2
Santa Eulalia	4	3
Santiago Chimaltenango	1	1
Todos Santos Cuchumatan	3	2
Quetzaltenango Department		
Quetzaltenango	1	1
San Marcos Department		
Comitancillo	5	6
Concepción Tutuapa	9	10
Ixchiguan	6	3
La Reforma	1	2
Malacatan	1	1
Nuevo Progreso	2	2
San José Ojetenam	3	3
San Lorenzo	1	2
San Marcos	1	1
San Miguel Ixtahuacán	2	2
Sibinal	2	3
Tacaná	5	6
Tajumulco	5	4
Suchitepequez Department		
Mazatenango	-	1
Total	93	91

Figure D2.1: Geographical representation of intervention and comparison facilities

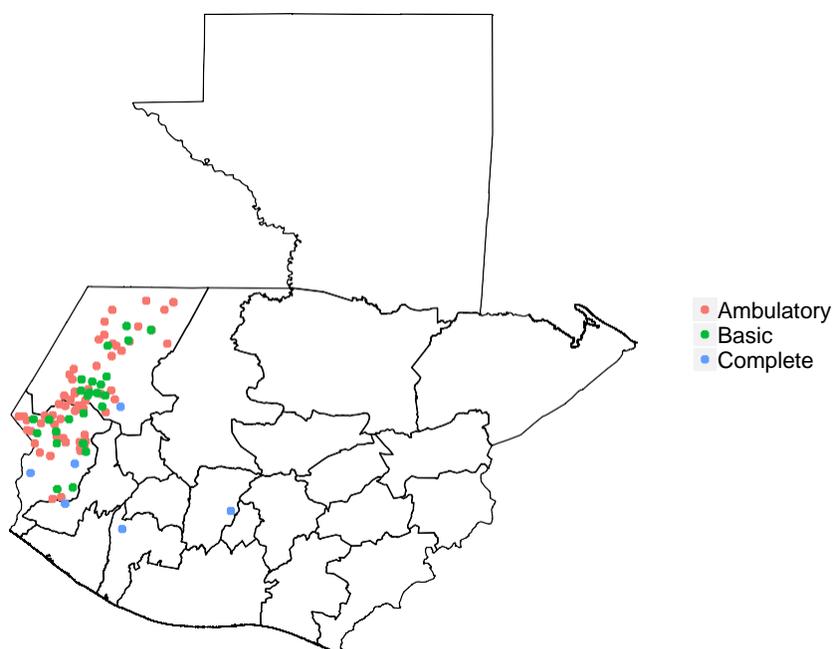


Table D2.3: Medical record extraction, facilities

Record Type	Baseline			Second Follow-Up		
	Ambulatory	Basic	Complete	Ambulatory	Basic	Complete
Growth and development	241	71	16	550	230	0
Antenatal care	258	181	26	603	147	5
Postpartum care	0	168	41	0	262	122
Uncomplicated delivery	0	236	85	0	426	145
Maternal complications	0	49	154	0	149	142
Neonatal complications	0	49	269	0	157	224
Total	499	754	591	1153	1371	638

Table D2.4: Referrals, ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Sends patient referrals to other facilities	68	100	(94.7 - 100)	60	98.3	(91.1 - 100)
Sends referred routine deliveries	-	-	-	59	71.2	(57.9 - 82.2)
Sends referred complicated deliveries	-	-	-	59	98.3	(90.9 - 100)

Table D2.5: Referrals, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Receives referred patients from other facilities	20	100	(83.2 - 100)	25	96.0	(79.6 - 99.9)
Receives referred routine deliveries	-	-	-	24	100.0	(85.8 - 100)
Receives referred complicated deliveries	-	-	-	24	91.7	(73 - 99)
Sends patient referrals to other facilities	20	100	(83.2 - 100)	25	100.0	(86.3 - 100)
Sends referred routine deliveries	-	-	-	25	0.0	(0 - 13.7)
Sends referred complicated deliveries	-	-	-	25	100.0	(86.3 - 100)

Table D2.6: Referrals, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Receives referred patients from other facilities	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Receives referred routine deliveries	-	-	-	6	100.0	(54.1 - 100)
Receives referred complicated deliveries	-	-	-	6	100.0	(54.1 - 100)
Sends patient referrals to other facilities	5	100	(47.8 - 100)	6	83.3	(35.9 - 99.6)
Sends referred routine deliveries	-	-	-	5	0.0	(0 - 52.2)
Sends referred complicated deliveries	-	-	-	5	60.0	(14.7 - 94.7)

Table D2.7: Requested referral documents, second follow-up evaluation

	Basic			Complete		
	N	%	CI	N	%	CI
Routine Deliveries						
Transfer form	24	0.0	(0 - 14.2)	6	0.0	(0 - 45.9)
Patient medical record	24	8.3	(1 - 27)	6	0.0	(0 - 45.9)
Lab tests	24	0.0	(0 - 14.2)	6	0.0	(0 - 45.9)
Proof of insurance	24	0.0	(0 - 14.2)	6	0.0	(0 - 45.9)
Referral sheet	24	79.2	(57.8 - 92.9)	6	83.3	(35.9 - 99.6)
Other documentation	24	54.2	(32.8 - 74.4)	6	66.7	(22.3 - 95.7)
Complicated Deliveries						
Transfer form	22	0.0	(0 - 15.4)	6	0.0	(0 - 45.9)
Patient medical record	22	4.5	(0.1 - 22.8)	6	0.0	(0 - 45.9)
Lab tests	22	4.5	(0.1 - 22.8)	6	0.0	(0 - 45.9)
Proof of insurance	22	0.0	(0 - 15.4)	6	0.0	(0 - 45.9)
Referral sheet	22	72.7	(49.8 - 89.3)	6	100.0	(54.1 - 100)
Other documentation	22	50.0	(28.2 - 71.8)	6	33.3	(4.3 - 77.7)

Table D2.8: Personnel employed, ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
General physician	68	10.3	(4.2 - 20.1)	60	8.3	(2.8 - 18.4)
Nurse	68	35.3	(24.1 - 47.8)	60	60.0	(46.5 - 72.4)
Auxiliary nurse	68	95.6	(87.6 - 99.1)	60	98.3	(91.1 - 100)
Midwife	68	47.1	(34.8 - 59.6)	60	1.7	(0 - 8.9)
Social worker	68	7.4	(2.4 - 16.3)	60	3.3	(0.4 - 11.5)
Health promoter	68	33.8	(22.8 - 46.3)	60	6.7	(1.8 - 16.2)
Equipment maintenance worker	67	7.5	(2.5 - 16.6)	59	1.7	(0 - 9.1)
Building maintenance worker	68	8.8	(3.3 - 18.2)	60	6.7	(1.8 - 16.2)

* One facility responded 'do not know' to equipment maintenance worker at baseline and was excluded.

† One facility responded 'do not know' to equipment maintenance worker at second follow-up and was excluded.

Table D2.9: Personnel employed, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
General physician	20	90.0	(68.3 - 98.8)	25	92.0	(74 - 99)
Nurse	20	100.0	(83.2 - 100)	25	100.0	(86.3 - 100)
Auxiliary nurse	20	100.0	(83.2 - 100)	25	100.0	(86.3 - 100)
Midwife	20	45.0	(23.1 - 68.5)	25	4.0	(0.1 - 20.4)
Social worker	20	50.0	(27.2 - 72.8)	25	36.0	(18 - 57.5)
Health promoter	19	47.4	(24.4 - 71.1)	24	4.2	(0.1 - 21.1)
Pediatrician	20	0.0	(0 - 16.8)	25	12.0	(2.5 - 31.2)
Nutritionist	20	60.0	(36.1 - 80.9)	25	8.0	(1 - 26)
Pharmacy dispenser	20	10.0	(1.2 - 31.7)	25	92.0	(74 - 99)
Lab technician	20	45.0	(23.1 - 68.5)	25	52.0	(31.3 - 72.2)
Internist	-	-	-	25	8.0	(1 - 26)
Gynecologist	-	-	-	25	12.0	(2.5 - 31.2)
Surgeon	-	-	-	25	8.0	(1 - 26)
Anesthesiologist	-	-	-	25	4.0	(0.1 - 20.4)
Emergency medical technician	-	-	-	25	12.0	(2.5 - 31.2)
Radiology technician	-	-	-	25	8.0	(1 - 26)
Ambulance driver	-	-	-	25	100.0	(86.3 - 100)
Equipment maintenance worker	20	5.0	(0.1 - 24.9)	25	12.0	(2.5 - 31.2)
Building maintenance worker	20	90.0	(68.3 - 98.8)	25	100.0	(86.3 - 100)

* One facility responded 'do not know' to health promoter at baseline and was excluded.

† One facility responded 'do not know' to health promoter at second follow-up and was excluded.

Table D2.10: Personnel employed, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
General physician	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Nurse	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Auxiliary nurse	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Midwife	5	0	(0 - 52.2)	6	0.0	(0 - 45.9)
Social worker	5	80	(28.4 - 99.5)	6	83.3	(35.9 - 99.6)
Health promoter	5	0	(0 - 52.2)	6	0.0	(0 - 45.9)
Pediatrician	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Nutritionist	5	80	(28.4 - 99.5)	6	100.0	(54.1 - 100)
Pharmacy dispenser	5	80	(28.4 - 99.5)	6	100.0	(54.1 - 100)
Lab technician	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Internist	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Gynecologist	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Surgeon	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Anesthesiologist	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Emergency medical technician	5	0	(0 - 52.2)	6	16.7	(0.4 - 64.1)
Radiology technician	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Ambulance driver	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Equipment maintenance worker	5	100	(47.8 - 100)	6	83.3	(35.9 - 99.6)
Building maintenance worker	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)

Table D2.11: Access to electricity and water, ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Functional electricity	68	91.2	(81.8 - 96.7)	60	95.0	(86.1 - 99)
Electricity source:						
Public central supply	59	98.3	(90.9 - 100)	57	96.5	(87.9 - 99.6)
Private supply	59	1.7	(0 - 9.1)	57	3.5	(0.4 - 12.1)
In-facility generator	59	0.0	(0 - 6.1)	57	0.0	(0 - 6.3)
solar generator	59	0.0	(0 - 6.1)	57	3.5	(0.4 - 12.1)
Other	59	0.0	(0 - 6.1)	57	0.0	(0 - 6.3)
Water source:						
Piped into facility	66	60.6	(47.8 - 72.4)	59	86.4	(75 - 94)
Public well (protected)	66	6.1	(1.7 - 14.8)	59	3.4	(0.4 - 11.7)
Facility well (protected)	66	3.0	(0.4 - 10.5)	59	0.0	(0 - 6.1)
Unprotected well	66	4.5	(0.9 - 12.7)	59	0.0	(0 - 6.1)
Hand pump	66	0.0	(0 - 5.4)	59	0.0	(0 - 6.1)
Bottled water	66	0.0	(0 - 5.4)	59	0.0	(0 - 6.1)
Tanker	66	0.0	(0 - 5.4)	59	0.0	(0 - 6.1)
Rainwater	66	1.5	(0 - 8.2)	59	3.4	(0.4 - 11.7)
Other	66	39.4	(27.6 - 52.2)	59	6.8	(1.9 - 16.5)

* Three facilities responded 'do not know' to electricity source at baseline and were excluded.

† One facility responded 'do not know' to water source at baseline and was excluded.

Table D2.12: Access to electricity and water, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Functional electricity	20	100	(83.2 - 100)	25	96.0	(79.6 - 99.9)
Electricity source:						
Public central supply	20	100	(83.2 - 100)	24	100.0	(85.8 - 100)
Private supply	20	0	(0 - 16.8)	24	4.2	(0.1 - 21.1)
In-facility generator	20	0	(0 - 16.8)	24	0.0	(0 - 14.2)
solar generator	20	0	(0 - 16.8)	24	0.0	(0 - 14.2)
Other	20	10	(1.2 - 31.7)	24	0.0	(0 - 14.2)
Water source:						
Piped into facility	20	70	(45.7 - 88.1)	25	96.0	(79.6 - 99.9)
Public well (protected)	20	0	(0 - 16.8)	25	0.0	(0 - 13.7)
Facility well (protected)	20	0	(0 - 16.8)	25	8.0	(1 - 26)
Unprotected well	20	0	(0 - 16.8)	25	0.0	(0 - 13.7)
Hand pump	20	0	(0 - 16.8)	25	0.0	(0 - 13.7)
Bottled water	20	0	(0 - 16.8)	25	4.0	(0.1 - 20.4)
Tanker	20	5	(0.1 - 24.9)	25	8.0	(1 - 26)
Rainwater	20	0	(0 - 16.8)	25	0.0	(0 - 13.7)
Other	20	30	(11.9 - 54.3)	25	0.0	(0 - 13.7)

Table D2.13: Access to electricity and water, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Functional electricity	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Electricity source:						
Public central supply	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Private supply	5	0	(0 - 52.2)	6	0.0	(0 - 45.9)
In-facility generator	5	0	(0 - 52.2)	6	0.0	(0 - 45.9)
solar generator	5	0	(0 - 52.2)	6	0.0	(0 - 45.9)
Other	5	20	(0.5 - 71.6)	6	0.0	(0 - 45.9)
Water source:						
Piped into facility	5	20	(0.5 - 71.6)	6	83.3	(35.9 - 99.6)
Public well (protected)	5	0	(0 - 52.2)	6	16.7	(0.4 - 64.1)
Facility well (protected)	5	80	(28.4 - 99.5)	6	33.3	(4.3 - 77.7)
Unprotected well	5	0	(0 - 52.2)	6	0.0	(0 - 45.9)
Hand pump	5	0	(0 - 52.2)	6	0.0	(0 - 45.9)
Bottled water	5	0	(0 - 52.2)	6	0.0	(0 - 45.9)
Tanker	5	0	(0 - 52.2)	6	0.0	(0 - 45.9)
Rainwater	5	0	(0 - 52.2)	6	0.0	(0 - 45.9)
Other	5	20	(0.5 - 71.6)	6	0.0	(0 - 45.9)

Table D2.14: Access to internet, ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Internet connection	68	14.7	(7.3 - 25.4)	60	5	(1 - 13.9)

Table D2.15: Access to internet, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Internet connection	20	60	(36.1 - 80.9)	24	54.2	(32.8 - 74.4)

* One facility responded 'do not know' to internet at baseline and was excluded.

Table D2.16: Access to internet, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Internet connection	5	100	(47.8 - 100)	6	100	(54.1 - 100)

Table D2.17: Situation room graphs and reports monitoring indicator, CAPs and CAIMIs

	2nd Follow-Up		
	N	%	CI
At least one child care visual:	23	91.3	(72 - 98.9)
Vaccination topics	23	87.0	(66.4 - 97.2)
Micronutrient supplementation	23	91.3	(72 - 98.9)
At least one maternal/neonatal care visual:	23	95.7	(78.1 - 99.9)
Family planning methods distributed	23	82.6	(61.2 - 95)
Prenatal care coverage	23	73.9	(51.6 - 89.8)
Delivery coverage	23	87.0	(66.4 - 97.2)
Postpartum coverage	23	73.9	(51.6 - 89.8)
Community visits	23	52.2	(30.6 - 73.2)
At least one of each type	23	91.3	(72 - 98.9)

Table D3.1: Child health care services provision, ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Provides childcare services	68	100.0	(94.7 - 100)	60	100.0	(94 - 100)
Vaccinates children under five	68	97.1	(89.8 - 99.6)	60	100.0	(94 - 100)
Childcare area						
Visual and auditory privacy	67	35.8	(24.5 - 48.5)	60	85.0	(73.4 - 92.9)
Non private area	67	3.0	(0.4 - 10.4)	60	13.3	(5.9 - 24.6)
Visual privacy only	67	59.7	(47 - 71.5)	60	0.0	(0 - 6)
Other	67	0.0	(0 - 5.4)	60	0.0	(0 - 6)
Do not provide service	67	1.5	(0 - 8)	60	1.7	(0 - 8.9)

* Childcare area data missing for one facility at baseline.

Table D3.2: Child health care services provision, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Provides childcare services	20	95.0	(75.1 - 99.9)	25	100	(86.3 - 100)
Vaccinates children under five	20	100.0	(83.2 - 100)	25	100	(86.3 - 100)
Childcare area						
Visual and auditory privacy	19	21.1	(6.1 - 45.6)	25	88	(68.8 - 97.5)
Non private area	19	21.1	(6.1 - 45.6)	25	8	(1 - 26)
Visual privacy only	19	57.9	(33.5 - 79.7)	25	0	(0 - 13.7)
Other	19	0.0	(0 - 17.6)	25	4	(0.1 - 20.4)
Do not provide service	19	0.0	(0 - 17.6)	25	0	(0 - 13.7)

* Observed childcare area data missing from one basic facility at the baseline and first follow-up.

Table D3.3: Child health care services provision, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Provides childcare services	5	100	(47.8 - 100)	6	83.3	(35.9 - 99.6)
Vaccinates children under five	5	60	(14.7 - 94.7)	6	33.3	(4.3 - 77.7)
Childcare area						
Visual and auditory privacy	5	60	(14.7 - 94.7)	6	100.0	(54.1 - 100)
Non private area	5	0	(0 - 52.2)	6	0.0	(0 - 45.9)
Visual privacy only	5	40	(5.3 - 85.3)	6	0.0	(0 - 45.9)
Other	5	0	(0 - 52.2)	6	0.0	(0 - 45.9)
Do not provide service	5	0	(0 - 52.2)	6	0.0	(0 - 45.9)

Table D3.4: Child health care equipment observed and functional, ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Scale	66	84.8	(73.9 - 92.5)	58	98.3	(90.8 - 100)
height rod	66	86.4	(75.7 - 93.6)	58	100.0	(93.8 - 100)
Stethoscope / pediatric stethoscope	66	84.8	(73.9 - 92.5)	58	100.0	(93.8 - 100)
Thermometer	66	87.9	(77.5 - 94.6)	58	84.5	(72.6 - 92.7)
All equipment observed and functional	66	56.1	(43.3 - 68.3)	58	81.0	(68.6 - 90.1)

Table D3.5: Child health care equipment observed and functional, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Pediatric scale	19	100.0	(82.4 - 100)	25	76	(54.9 - 90.6)
Scale	19	94.7	(74 - 99.9)	25	100	(86.3 - 100)
height rod	19	89.5	(66.9 - 98.7)	25	100	(86.3 - 100)
Pediatric stethoscope	19	21.1	(6.1 - 45.6)	25	52	(31.3 - 72.2)
Blood pressure apparatus	19	21.1	(6.1 - 45.6)	25	52	(31.3 - 72.2)
All equipment observed and functional	19	15.8	(3.4 - 39.6)	25	36	(18 - 57.5)

* Due to a survey programming error, data about pediatric scales is missing in 7 facilities at the first follow-up. Pediatric scales are excluded in the overall indicator value for these 7 facilities.

Table D3.6: Child health care equipment observed and functional, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Pediatric scale	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Scale	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
height rod	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Pediatric stethoscope	5	60	(14.7 - 94.7)	6	83.3	(35.9 - 99.6)
Blood pressure apparatus	5	40	(5.3 - 85.3)	6	83.3	(35.9 - 99.6)
All equipment observed and functional	5	40	(5.3 - 85.3)	6	66.7	(22.3 - 95.7)

Table D3.4: Child health care equipment observed and functional, ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Oral rehydration salts	66	83.3	(72.1 - 91.4)	58	81.0	(68.6 - 90.1)
Micronutrients / ferrous sulfate	66	93.9	(85.2 - 98.3)	58	96.6	(88.1 - 99.6)
Zinc sulfate / gluconate	66	63.6	(50.9 - 75.1)	58	84.5	(72.6 - 92.7)
Albendazole / mebendazole	66	65.2	(52.4 - 76.5)	58	98.3	(90.8 - 100)
Antibiotics	66	97.0	(89.5 - 99.6)	2	100.0	(15.8 - 100)
All drugs available on day of observation	66	48.5	(36 - 61.1)	58	65.5	(51.9 - 77.5)
All drugs available in past three months	66	48.5	(36 - 61.1)	58	50.0	(36.6 - 63.4)

* Antibiotics only required at facilities that employ a doctor on staff.

† Three-month stock data not available for some facilities at baseline and first follow-up evaluations.

Table D3.5: Child health care equipment observed and functional, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Oral rehydration salts	19	94.7	(74 - 99.9)	25	96	(79.6 - 99.9)
Micronutrients / ferrous sulfate	19	84.2	(60.4 - 96.6)	25	92	(74 - 99)
Zinc sulfate / gluconate	19	94.7	(74 - 99.9)	25	100	(86.3 - 100)
Albendazole / mebendazole	19	68.4	(43.4 - 87.4)	25	92	(74 - 99)
Antibiotics	19	0.0	(0 - 17.6)	25	96	(79.6 - 99.9)
Ringer's lactate / Hartman's / saline solution	19	100.0	(82.4 - 100)	25	100	(86.3 - 100)
All drugs available on day of observation	19	52.6	(28.9 - 75.6)	25	84	(63.9 - 95.5)
All drugs available in past three months	19	52.6	(28.9 - 75.6)	25	68	(46.5 - 85.1)

* Three-month stock data not available for some facilities at baseline and first follow-up evaluations.

Table D3.6: Child health care equipment observed and functional, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Oral rehydration salts	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Micronutrients / ferrous sulfate	5	60	(14.7 - 94.7)	6	50.0	(11.8 - 88.2)
Zinc sulfate / gluconate	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Albendazole / mebendazole	5	100	(47.8 - 100)	6	66.7	(22.3 - 95.7)
Antibiotics	5	0	(0 - 52.2)	6	83.3	(35.9 - 99.6)
Ringer's lactate / Hartmann's / saline solution / dextrose	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
All drugs available on day of observation	5	60	(14.7 - 94.7)	6	33.3	(4.3 - 77.7)
All drugs available in past three months	5	60	(14.7 - 94.7)	6	16.7	(0.4 - 64.1)

* Dextrose not captured at baseline evaluation.

† Three-month stock data not available for some facilities at baseline and first follow-up evaluations.

Table D3.7: Child health care vaccines, ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Pentavalent / (DPT + HiB + HepB)	33	100.0	(89.4 - 100)	46	93.5	(82.1 - 98.6)
Polio	33	97.0	(84.2 - 99.9)	46	87.0	(73.7 - 95.1)
Measles, mumps, rubella	33	100.0	(89.4 - 100)	46	91.3	(79.2 - 97.6)
BCG	33	93.9	(79.8 - 99.3)	46	80.4	(66.1 - 90.6)
Rotavirus	33	97.0	(84.2 - 99.9)	46	91.3	(79.2 - 97.6)
Pneumococcal conjugate	33	100.0	(89.4 - 100)	46	91.3	(79.2 - 97.6)
All vaccines observed day of survey	33	87.9	(71.8 - 96.6)	46	78.3	(63.6 - 89.1)
All vaccines continuously available in past 3 months	33	87.9	(71.8 - 96.6)	46	73.9	(58.9 - 85.7)

* DPT + HepB + Hib not captured as Pentavalent alternatives at baseline and first follow-up.

† Three-month stock data not available for some facilities at baseline evaluation.

Table D3.8: Child health care vaccines, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Pentavalent / (DPT + HiB + HepB)	16	100.0	(79.4 - 100)	25	84	(63.9 - 95.5)
Polio	16	100.0	(79.4 - 100)	25	84	(63.9 - 95.5)
Measles, mumps, rubella	16	100.0	(79.4 - 100)	25	84	(63.9 - 95.5)
BCG	16	100.0	(79.4 - 100)	25	92	(74 - 99)
Rotavirus	16	87.5	(61.7 - 98.4)	25	80	(59.3 - 93.2)
Pneumococcal conjugate	16	87.5	(61.7 - 98.4)	25	80	(59.3 - 93.2)
All vaccines observed day of survey	16	81.2	(54.4 - 96)	25	76	(54.9 - 90.6)
All vaccines continuously available in past 3 months	16	75.0	(47.6 - 92.7)	25	60	(38.7 - 78.9)

* DPT + HepB + Hib not captured as Pentavalent alternatives at baseline and first follow-up.

† Three-month stock data not available for some facilities at baseline evaluation.

Table D3.9: Child health care vaccines, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Pentavalent / (DPT + HiB + HepB)	4	50	(6.8 - 93.2)	3	66.7	(9.4 - 99.2)
Polio	4	50	(6.8 - 93.2)	3	33.3	(0.8 - 90.6)
Measles, mumps, rubella	4	50	(6.8 - 93.2)	3	33.3	(0.8 - 90.6)
BCG	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)
Rotavirus	4	50	(6.8 - 93.2)	3	33.3	(0.8 - 90.6)
Pneumococcal conjugate	4	50	(6.8 - 93.2)	3	33.3	(0.8 - 90.6)
All vaccines observed day of survey	4	50	(6.8 - 93.2)	3	33.3	(0.8 - 90.6)
All vaccines continuously available in past 3 months	4	50	(6.8 - 93.2)	3	33.3	(0.8 - 90.6)

* DPT + HepB + Hib not captured as Pentavalent alternatives at baseline and first follow-up.

† Three-month stock data not available for some facilities at baseline evaluation.

Table D3.10: Child health care composite indicator, ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
All equipment observed and functional	66	56.1	(43.3 - 68.3)	58	81.0	(68.6 - 90.1)
All pharmacy inputs observed day of survey	66	48.5	(36 - 61.1)	58	65.5	(51.9 - 77.5)
All pharmacy inputs continuously available in past three months	66	48.5	(36 - 61.1)	58	50.0	(36.6 - 63.4)
All vaccines continuously observed day of survey	33	87.9	(71.8 - 96.6)	46	78.3	(63.6 - 89.1)
All vaccines continuously available in past three months	33	87.9	(71.8 - 96.6)	46	73.9	(58.9 - 85.7)
Child health care provision according to standard	66	24.2	(14.5 - 36.4)	58	37.9	(25.5 - 51.6)

* Three month stock data not available for all drugs and vaccines at baseline and first follow-up.

Table D3.11: Child health care composite indicator, ambulatory basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
All equipment observed and functional	19	15.8	(3.4 - 39.6)	25	36	(18 - 57.5)
All pharmacy inputs observed day of survey	19	52.6	(28.9 - 75.6)	25	84	(63.9 - 95.5)
All pharmacy inputs continuously available in past three months	19	52.6	(28.9 - 75.6)	25	68	(46.5 - 85.1)
All vaccines continuously observed day of survey	16	81.2	(54.4 - 96)	25	76	(54.9 - 90.6)
All vaccines continuously available in past three months	16	75.0	(47.6 - 92.7)	25	60	(38.7 - 78.9)
Child health care provision according to standard	19	5.3	(0.1 - 26)	25	12	(2.5 - 31.2)

* Three month stock data not available for all drugs and vaccines at baseline and first follow-up.

Table D3.12: Child health care composite indicator, ambulatory complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
All equipment observed and functional	5	40	(5.3 - 85.3)	6	66.7	(22.3 - 95.7)
All pharmacy inputs observed day of survey	5	60	(14.7 - 94.7)	6	33.3	(4.3 - 77.7)
All pharmacy inputs continuously available in past three months	5	60	(14.7 - 94.7)	6	16.7	(0.4 - 64.1)
All vaccines continuously observed day of survey	4	50	(6.8 - 93.2)	3	33.3	(0.8 - 90.6)
All vaccines continuously available in past three months	4	50	(6.8 - 93.2)	3	33.3	(0.8 - 90.6)
Child health care provision according to standard	5	20	(0.5 - 71.6)	6	16.7	(0.4 - 64.1)

* Three month stock data not available for all drugs and vaccines at baseline and first follow-up.

Table D3.13: Growth and development monitoring indicator, ambulatory facilities

	2nd Follow-Up		
	N	%	CI
Height checked	517	93.4	(90.9 - 95.4)
Weight checked	517	93.8	(91.4 - 95.7)
Counselling	517	88.0	(84.9 - 90.7)
Growth and development visit according to standard	517	87.4	(84.3 - 90.2)

Table D3.14: Growth and development monitoring indicator, basic facilities

	2nd Follow-Up		
	N	%	CI
Height checked	218	99.1	(96.7 - 99.9)
Weight checked	218	99.1	(96.7 - 99.9)
Counselling	218	96.8	(93.5 - 98.7)
Growth and development visit according to standard	218	96.8	(93.5 - 98.7)

Table D4.1: Immunization services provision, ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Vaccinates children under five	68	97.1	(89.8 - 99.6)	60	100.0	(94 - 100)
Immunization area						
Visual and auditory privacy	66	28.8	(18.3 - 41.3)	60	88.3	(77.4 - 95.2)
Non private area	66	18.2	(9.8 - 29.6)	60	11.7	(4.8 - 22.6)
Visual privacy only	66	43.9	(31.7 - 56.7)	60	0.0	(0 - 6)
Other	66	3.0	(0.4 - 10.5)	60	0.0	(0 - 6)
Do not provide service	66	6.1	(1.7 - 14.8)	60	0.0	(0 - 6)

* Immunization area data missing from two facilities at the baseline.

Table D4.2: Immunization services provision, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Vaccinates children under five	20	100.0	(83.2 - 100)	25	100	(86.3 - 100)
Immunization area						
Visual and auditory privacy	19	31.6	(12.6 - 56.6)	25	88	(68.8 - 97.5)
Non private area	19	21.1	(6.1 - 45.6)	25	8	(1 - 26)
Visual privacy only	19	47.4	(24.4 - 71.1)	25	0	(0 - 13.7)
Other	19	0.0	(0 - 17.6)	25	0	(0 - 13.7)
Do not provide service	19	0.0	(0 - 17.6)	25	4	(0.1 - 20.4)

* Immunization area data missing from one facility at the baseline.

Table D4.3: Immunization services provision, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Vaccinates children under five	5	60	(14.7 - 94.7)	6	33.3	(4.3 - 77.7)
Immunization area						
Visual and auditory privacy	5	60	(14.7 - 94.7)	6	66.7	(22.3 - 95.7)
Non private area	5	0	(0 - 52.2)	6	0.0	(0 - 45.9)
Visual privacy only	5	0	(0 - 52.2)	6	0.0	(0 - 45.9)
Other	5	20	(0.5 - 71.6)	6	0.0	(0 - 45.9)
Do not provide service	5	20	(0.5 - 71.6)	6	33.3	(4.3 - 77.7)

Table D4.4: Vaccine storage (if provided), ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Stores vaccines	66	66.7	(54 - 77.8)	60	95	(86.1 - 99)
Collected from another health facility	66	21.2	(12.1 - 33)	60	5	(1 - 13.9)
Delivered when immunization services provided	66	12.1	(5.4 - 22.5)	60	0	(0 - 6)
Does not store vaccines	66	0.0	(0 - 5.4)	60	0	(0 - 6)
Don't know / did not respond	66	0.0	(0 - 5.4)	60	0	(0 - 6)

Table D4.5: Vaccine storage (if provided), basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Stores vaccines	20	100	(83.2 - 100)	25	100	(86.3 - 100)
Collected from another health facility	20	0	(0 - 16.8)	25	0	(0 - 13.7)
Delivered when immunization services provided	20	0	(0 - 16.8)	25	0	(0 - 13.7)
Does not store vaccines	20	0	(0 - 16.8)	25	0	(0 - 13.7)
Don't know / did not respond	20	0	(0 - 16.8)	25	0	(0 - 13.7)

Table D4.6: Vaccine storage (if provided), complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Stores vaccines	3	66.7	(9.4 - 99.2)	6	100	(54.1 - 100)
Collected from another health facility	3	0.0	(0 - 70.8)	6	0	(0 - 45.9)
Delivered when immunization services provided	3	33.3	(0.8 - 90.6)	6	0	(0 - 45.9)
Does not store vaccines	3	0.0	(0 - 70.8)	6	0	(0 - 45.9)
Don't know / did not respond	3	0.0	(0 - 70.8)	6	0	(0 - 45.9)

Table D4.7: Vaccine supply, ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Ordering strategy						
Determines own need	44	97.7	(88 - 99.9)	57	98.2	(90.6 - 100)
Need determined elsewhere	44	2.3	(0.1 - 12)	57	1.8	(0 - 9.4)
Both (differ by vaccine)	44	0.0	(0 - 8)	57	0.0	(0 - 6.3)
Time to receive supplies						
One day	44	52.3	(36.7 - 67.5)	56	62.5	(48.5 - 75.1)
2 - 7 days	44	20.5	(9.8 - 35.3)	56	10.7	(4 - 21.9)
More than one week	44	20.5	(9.8 - 35.3)	56	23.2	(13 - 36.4)
Reception of quantity ordered						
Always	44	84.1	(69.9 - 93.4)	57	56.1	(42.4 - 69.3)
Almost always	44	9.1	(2.5 - 21.7)	57	42.1	(29.1 - 55.9)
Almost never	44	6.8	(1.4 - 18.7)	57	1.8	(0 - 9.4)

* One facility at second follow-up responded 'do not know' to reception time and was excluded.

Table D4.8: Vaccine supply, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Ordering strategy						
Determines own need	20	90.0	(68.3 - 98.8)	25	92	(74 - 99)
Need determined elsewhere	20	5.0	(0.1 - 24.9)	25	0	(0 - 13.7)
Both (differ by vaccine)	20	5.0	(0.1 - 24.9)	25	8	(1 - 26)
Time to receive supplies						
One day	20	90.0	(68.3 - 98.8)	25	72	(50.6 - 87.9)
2 - 7 days	20	10.0	(1.2 - 31.7)	25	12	(2.5 - 31.2)
More than one week	20	0.0	(0 - 16.8)	25	12	(2.5 - 31.2)
Reception of quantity ordered						
Always	19	47.4	(24.4 - 71.1)	25	76	(54.9 - 90.6)
Almost always	19	47.4	(24.4 - 71.1)	25	24	(9.4 - 45.1)
Almost never	19	5.3	(0.1 - 26)	25	0	(0 - 13.7)

* One facility at baseline responded 'do not know' to reception time and was excluded.

Table D4.9: Vaccine supply, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Ordering strategy						
Determines own need	2	100	(15.8 - 100)	6	83.3	(35.9 - 99.6)
Need determined elsewhere	2	0	(0 - 84.2)	6	16.7	(0.4 - 64.1)
Both (differ by vaccine)	2	0	(0 - 84.2)	6	0.0	(0 - 45.9)
Time to receive supplies						
One day	2	100	(15.8 - 100)	6	100.0	(54.1 - 100)
2 - 7 days	2	0	(0 - 84.2)	6	0.0	(0 - 45.9)
More than one week	2	0	(0 - 84.2)	6	0.0	(0 - 45.9)
Reception of quantity ordered						
Always	2	100	(15.8 - 100)	6	100.0	(54.1 - 100)
Almost always	2	0	(0 - 84.2)	6	0.0	(0 - 45.9)
Almost never	2	0	(0 - 84.2)	6	0.0	(0 - 45.9)

Table D4.10: Vaccine storage equipment, ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Electric fridge	47	95.7	(85.5 - 99.5)	58	94.8	(85.6 - 98.9)
Kerosene fridge	47	95.7	(85.5 - 99.5)	58	1.7	(0 - 9.2)
Gas fridge	47	91.5	(79.6 - 97.6)	58	3.4	(0.4 - 11.9)
Solar fridge	47	93.6	(82.5 - 98.7)	58	1.7	(0 - 9.2)
Cold box	47	95.7	(85.5 - 99.5)	58	53.4	(39.9 - 66.7)

Table D4.11: Vaccine storage equipment, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Electric fridge	20	95	(75.1 - 99.9)	25	100	(86.3 - 100)
Kerosene fridge	20	90	(68.3 - 98.8)	25	12	(2.5 - 31.2)
Gas fridge	20	70	(45.7 - 88.1)	25	0	(0 - 13.7)
Solar fridge	20	90	(68.3 - 98.8)	25	12	(2.5 - 31.2)
Cold box	20	100	(83.2 - 100)	25	100	(86.3 - 100)

Table D4.12: Vaccine storage equipment, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Electric fridge	5	100	(47.8 - 100)	4	100	(39.8 - 100)
Kerosene fridge	5	80	(28.4 - 99.5)	4	25	(0.6 - 80.6)
Gas fridge	5	80	(28.4 - 99.5)	4	0	(0 - 60.2)
Solar fridge	5	80	(28.4 - 99.5)	4	0	(0 - 60.2)
Cold box	5	80	(28.4 - 99.5)	4	100	(39.8 - 100)

Table D4.13: Vaccines observed, ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Pentavalent (DPT + HepB + Hib)	34	100.0	(89.7 - 100)	54	94.4	(84.6 - 98.8)
Polio	34	97.1	(84.7 - 99.9)	54	87.0	(75.1 - 94.6)
Measles, mumps, rubella	34	100.0	(89.7 - 100)	54	92.6	(82.1 - 97.9)
Rotavirus	34	97.1	(84.7 - 99.9)	54	92.6	(82.1 - 97.9)
Pneumococcal conjugate	34	100.0	(89.7 - 100)	54	92.6	(82.1 - 97.9)
BCG	34	94.1	(80.3 - 99.3)	54	79.6	(66.5 - 89.4)
Influenza	34	76.5	(58.8 - 89.3)	54	37.0	(24.3 - 51.3)
Tetanus	34	97.1	(84.7 - 99.9)	54	92.6	(82.1 - 97.9)

* DPT + HepB + Hib not captured as Pentavalent alternatives at baseline and first follow-up.

Table D4.14: Vaccines observed, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Pentavalent (DPT + HepB + Hib)	17	100.0	(80.5 - 100)	25	84	(63.9 - 95.5)
Polio	17	100.0	(80.5 - 100)	25	84	(63.9 - 95.5)
Measles, mumps, rubella	17	100.0	(80.5 - 100)	25	84	(63.9 - 95.5)
Rotavirus	17	88.2	(63.6 - 98.5)	25	80	(59.3 - 93.2)
Pneumococcal conjugate	17	88.2	(63.6 - 98.5)	25	80	(59.3 - 93.2)
BCG	17	100.0	(80.5 - 100)	25	92	(74 - 99)
Influenza	17	58.8	(32.9 - 81.6)	25	24	(9.4 - 45.1)
Tetanus	17	94.1	(71.3 - 99.9)	25	88	(68.8 - 97.5)

* DPT + HepB + Hib not captured as Pentavalent alternatives at baseline and first follow-up.

Table D4.15: Vaccines observed, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Pentavalent (DPT + HepB + Hib)	4	50	(6.8 - 93.2)	4	50	(6.8 - 93.2)
Polio	4	50	(6.8 - 93.2)	4	25	(0.6 - 80.6)
Measles, mumps, rubella	4	50	(6.8 - 93.2)	4	25	(0.6 - 80.6)
Rotavirus	4	50	(6.8 - 93.2)	4	25	(0.6 - 80.6)
Pneumococcal conjugate	4	50	(6.8 - 93.2)	4	25	(0.6 - 80.6)
BCG	4	100	(39.8 - 100)	4	100	(39.8 - 100)
Influenza	4	25	(0.6 - 80.6)	4	25	(0.6 - 80.6)
Tetanus	4	100	(39.8 - 100)	4	75	(19.4 - 99.4)

* DPT + HepB + Hib not captured as Pentavalent alternatives at baseline and first follow-up.

Table D5.1: Family planning services provision, ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Offers family planning services	68	97.1	(89.8 - 99.6)	60	100.0	(94 - 100)
Family planning area						
Visual and auditory privacy	67	38.8	(27.1 - 51.5)	60	96.7	(88.5 - 99.6)
Non private area	67	4.5	(0.9 - 12.5)	60	3.3	(0.4 - 11.5)
Visual privacy only	67	55.2	(42.6 - 67.4)	60	0.0	(0 - 6)
Other	67	1.5	(0 - 8)	60	0.0	(0 - 6)
Do not provide service	67	0.0	(0 - 5.4)	60	0.0	(0 - 6)

Table D5.2: Family planning services provision, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Offers family planning services	20	100	(83.2 - 100)	25	100	(86.3 - 100)
Family planning area						
Visual and auditory privacy	20	35	(15.4 - 59.2)	25	100	(86.3 - 100)
Non private area	20	0	(0 - 16.8)	25	0	(0 - 13.7)
Visual privacy only	20	65	(40.8 - 84.6)	25	0	(0 - 13.7)
Other	20	0	(0 - 16.8)	25	0	(0 - 13.7)
Do not provide service	20	0	(0 - 16.8)	25	0	(0 - 13.7)

Table D5.3: Family planning services provision, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Offers family planning services	5	100	(47.8 - 100)	6	100	(54.1 - 100)
Family planning area						
Visual and auditory privacy	5	20	(0.5 - 71.6)	6	100	(54.1 - 100)
Non private area	5	0	(0 - 52.2)	6	0	(0 - 45.9)
Visual privacy only	5	80	(28.4 - 99.5)	6	0	(0 - 45.9)
Other	5	0	(0 - 52.2)	6	0	(0 - 45.9)
Do not provide service	5	0	(0 - 52.2)	6	0	(0 - 45.9)

Table D5.4: Family planning composite indicator, ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Male condom	65	86.2	(75.3 - 93.5)	59	47.5	(34.3 - 60.9)
Any oral pill	65	72.3	(59.8 - 82.7)	59	88.1	(77.1 - 95.1)
Any injectable	65	96.9	(89.3 - 99.6)	59	98.3	(90.9 - 100)
All methods continuously in stock in past three months	65	64.6	(51.8 - 76.1)	59	16.9	(8.4 - 29)
Family planning services according to SMI standard	65	64.6	(51.8 - 76.1)	59	13.6	(6 - 25)

* Three-month stock data unavailable for some facilities at baseline.

Table D5.5: Family planning composite indicator, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Male condom	20	95	(75.1 - 99.9)	25	48	(27.8 - 68.7)
Any oral pill	20	100	(83.2 - 100)	25	88	(68.8 - 97.5)
Any injectable	20	100	(83.2 - 100)	25	100	(86.3 - 100)
Intrauterine device	20	75	(50.9 - 91.3)	25	84	(63.9 - 95.5)
All methods continuously in stock in past three months	20	65	(40.8 - 84.6)	25	12	(2.5 - 31.2)
Family planning services according to SMI standard	20	65	(40.8 - 84.6)	25	12	(2.5 - 31.2)

* Three-month stock only evaluated for condoms, pills, and injectables at baseline evaluation.

† Three-month stock data unavailable for some facilities at baseline.

Table D5.6: Family planning services composite indicator, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Male condom	5	100	(47.8 - 100)	6	83.3	(35.9 - 99.6)
Any oral pill	5	80	(28.4 - 99.5)	6	100.0	(54.1 - 100)
Any injectable	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Intrauterine device	5	80	(28.4 - 99.5)	6	100.0	(54.1 - 100)
All methods continuously in stock in past three months	5	80	(28.4 - 99.5)	6	16.7	(0.4 - 64.1)
Family planning services according to SMI standard	5	80	(28.4 - 99.5)	6	16.7	(0.4 - 64.1)

* Three-month stock only evaluated for condoms, pills, and injectables at baseline evaluation.

† Three-month stock data unavailable for some facilities at baseline.

Table D5.7: Family planning procedures and surgeries, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Doctor trained in IUD insertion	-	-	-	25	68	(46.5 - 85.1)
Nurse trained in IUD insertion	-	-	-	25	72	(50.6 - 87.9)
Doctor trained in implant insertion	-	-	-	25	64	(42.5 - 82)
Nurse trained in implant insertion	-	-	-	25	60	(38.7 - 78.9)
Doctor trained in tubal ligation	20	5	(0.1 - 24.9)	25	16	(4.5 - 36.1)
Doctor trained in vasectomy	20	0	(0 - 16.8)	25	12	(2.5 - 31.2)

* IUD/implant insertion training data not captured at baseline.

† Implant insertion training data not captured at first follow-up.

Table D5.8: Family planning procedures and surgeries, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Doctor trained in IUD insertion	-	-	-	6	100.0	(54.1 - 100)
Nurse trained in IUD insertion	-	-	-	6	100.0	(54.1 - 100)
Doctor trained in implant insertion	-	-	-	6	100.0	(54.1 - 100)
Nurse trained in implant insertion	-	-	-	6	100.0	(54.1 - 100)
Doctor trained in tubal ligation	5	80	(28.4 - 99.5)	6	100.0	(54.1 - 100)
Doctor trained in vasectomy	5	60	(14.7 - 94.7)	6	83.3	(35.9 - 99.6)

* IUD/implant insertion training data not captured at baseline.

† Implant insertion training data not captured at first follow-up.

Table D6.1: Antenatal care service provision, ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Offers antenatal care services	68	95.6	(87.6 - 99.1)	60	98.3	(91.1 - 100)
Antenatal care area						
Visual and auditory privacy	67	44.8	(32.6 - 57.4)	60	93.3	(83.8 - 98.2)
Visual privacy only	67	55.2	(42.6 - 67.4)	60	1.7	(0 - 8.9)
Non private area	67	0.0	(0 - 5.4)	60	3.3	(0.4 - 11.5)
Do not provide service	67	0.0	(0 - 5.4)	60	1.7	(0 - 8.9)

* Antenatal care area data missing for one facility at baseline.

Table D6.2: Antenatal care service provision, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Offers antenatal care services	20	100	(83.2 - 100)	25	100	(86.3 - 100)
Offers (non-urgent) delivery services	20	95	(75.1 - 99.9)	25	96	(79.6 - 99.9)
Antenatal care area						
Visual and auditory privacy	20	45	(23.1 - 68.5)	25	96	(79.6 - 99.9)
Visual privacy only	20	50	(27.2 - 72.8)	25	0	(0 - 13.7)
Non private area	20	5	(0.1 - 24.9)	25	4	(0.1 - 20.4)
Do not provide service	20	0	(0 - 16.8)	25	0	(0 - 13.7)
Delivery area						
Visual and auditory privacy	20	55	(31.5 - 76.9)	25	100	(86.3 - 100)
Visual privacy only	20	30	(11.9 - 54.3)	25	0	(0 - 13.7)
Non private area	20	15	(3.2 - 37.9)	25	0	(0 - 13.7)
Do not provide service	20	0	(0 - 16.8)	25	0	(0 - 13.7)

* One facility at the first follow-up refused to show the delivery area.

Table D6.3: Antenatal care service provision, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Offers antenatal care services	5	100	(47.8 - 100)	6	100	(54.1 - 100)
Offers (non-urgent) delivery services	5	100	(47.8 - 100)	6	100	(54.1 - 100)
Antenatal care area						
Visual and auditory privacy	5	60	(14.7 - 94.7)	6	100	(54.1 - 100)
Visual privacy only	5	40	(5.3 - 85.3)	6	0	(0 - 45.9)
Non private area	5	0	(0 - 52.2)	6	0	(0 - 45.9)
Do not provide service	5	0	(0 - 52.2)	6	0	(0 - 45.9)
Delivery area						
Visual and auditory privacy	5	20	(0.5 - 71.6)	6	100	(54.1 - 100)
Visual privacy only	5	40	(5.3 - 85.3)	6	0	(0 - 45.9)
Non private area	5	40	(5.3 - 85.3)	6	0	(0 - 45.9)
Do not provide service	5	0	(0 - 52.2)	6	0	(0 - 45.9)

Table D6.4: Antenatal/postnatal care equipment observed and functional, ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Scale with measuring rod	67	65.7	(53.1 - 76.8)	59	98.3	(90.9 - 100)
Gynecological exam table / stretcher	67	80.6	(69.1 - 89.2)	59	94.9	(85.9 - 98.9)
CLAP obstetric tape / measuring tape	67	67.2	(54.6 - 78.2)	59	96.6	(88.3 - 99.6)
Lamp	67	46.3	(34 - 58.9)	59	96.6	(88.3 - 99.6)
Sphygmomanometer	67	77.6	(65.8 - 86.9)	59	98.3	(90.9 - 100)
Stethoscope	67	85.1	(74.3 - 92.6)	59	100.0	(93.9 - 100)
Perinatal maternal medical history form / card	67	94.0	(85.4 - 98.3)	59	94.9	(85.9 - 98.9)
All ANC equipment observed and functioning	67	19.4	(10.8 - 30.9)	59	81.4	(69.1 - 90.3)

* Stretcher is used as an alternative to gynecological exam table for ambulatory facilities without a doctor.

† Glycemia test only required at facilities with a doctor.

Table D6.5: Antenatal/postnatal care equipment observed and functional, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Scale with measuring rod	20	90	(68.3 - 98.8)	25	100	(86.3 - 100)
Gynecological exam table / stretcher	20	85	(62.1 - 96.8)	25	76	(54.9 - 90.6)
CLAP obstetric tape / measuring tape	20	80	(56.3 - 94.3)	25	100	(86.3 - 100)
Lamp	20	80	(56.3 - 94.3)	25	96	(79.6 - 99.9)
Sphygmomanometer	20	90	(68.3 - 98.8)	25	100	(86.3 - 100)
Stethoscope	20	90	(68.3 - 98.8)	25	100	(86.3 - 100)
Perinatal maternal medical history form / card	20	100	(83.2 - 100)	25	100	(86.3 - 100)
All ANC equipment observed and functioning	20	30	(11.9 - 54.3)	25	76	(54.9 - 90.6)

* Glycemia test not captured for basic facilities at baseline.

Table D6.6: Antenatal/postnatal care equipment observed and functional, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Scale with measuring rod	5	100	(47.8 - 100)	6	100	(54.1 - 100)
Gynecological exam table / stretcher	5	80	(28.4 - 99.5)	6	100	(54.1 - 100)
CLAP obstetric tape / measuring tape	5	80	(28.4 - 99.5)	6	100	(54.1 - 100)
Lamp	5	100	(47.8 - 100)	6	100	(54.1 - 100)
Sphygmomanometer	5	80	(28.4 - 99.5)	6	100	(54.1 - 100)
Stethoscope	5	80	(28.4 - 99.5)	6	100	(54.1 - 100)
Perinatal maternal medical history form / card	5	80	(28.4 - 99.5)	6	100	(54.1 - 100)
All ANC equipment observed and functioning	5	60	(14.7 - 94.7)	6	100	(54.1 - 100)

Table D6.7: Antenatal/postnatal care pharmacy inputs, ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Multivitamin / iron + folic acid	67	86.6	(76 - 93.7)	59	30.5	(19.2 - 43.9)
Tetanus vaccine (if vaccines stored)	34	97.1	(84.7 - 99.9)	47	91.5	(79.6 - 97.6)
All ANC drugs observed day of survey	67	85.1	(74.3 - 92.6)	59	30.5	(19.2 - 43.9)
All ANC drugs continuously available in past three months	67	80.6	(69.1 - 89.2)	59	20.3	(11 - 32.8)

Table D6.8: Antenatal/postnatal care pharmacy inputs, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Multivitamin / iron + folic acid	20	100.0	(83.2 - 100)	25	52	(31.3 - 72.2)
Tetanus vaccine (if vaccines stored)	17	94.1	(71.3 - 99.9)	25	88	(68.8 - 97.5)
All ANC drugs observed day of survey	20	95.0	(75.1 - 99.9)	25	40	(21.1 - 61.3)
All ANC drugs continuously available in past three months	20	75.0	(50.9 - 91.3)	25	28	(12.1 - 49.4)

Table D6.9: Antenatal/postnatal care pharmacy inputs, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Multivitamin / iron + folic acid	5	80	(28.4 - 99.5)	6	66.7	(22.3 - 95.7)
Tetanus vaccine (if vaccines stored)	4	100	(39.8 - 100)	3	100.0	(29.2 - 100)
All ANC drugs observed day of survey	5	80	(28.4 - 99.5)	6	66.7	(22.3 - 95.7)
All ANC drugs continuously available in past three months	5	60	(14.7 - 94.7)	6	33.3	(4.3 - 77.7)

Table D6.10: Antenatal/postnatal care lab inputs, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Hematological equipment	10	0	(0 - 30.8)	18	22.2	(6.4 - 47.6)
Blood chemistry equipment + reagents / glucometer + reagents	-	-	-	18	61.1	(35.7 - 82.7)
Sharps disposal	-	-	-	18	94.4	(72.7 - 99.9)
All lab inputs observed	8	0	(0 - 36.9)	18	22.2	(6.4 - 47.6)

* Blood chemistry/glucometer and reagents, sharps disposal data not available at baseline.

Table D6.11: Antenatal/postnatal care lab inputs, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Hematological equipment	-	-	-	5	100	(47.8 - 100)
Blood chemistry equipment	-	-	-	5	100	(47.8 - 100)
Blood chemistry reagents	-	-	-	5	80	(28.4 - 99.5)
Prothrombine and thromboplastin tests	-	-	-	5	80	(28.4 - 99.5)
Ptt and tpt reagents	-	-	-	5	80	(28.4 - 99.5)
Syphillis test	-	-	-	5	100	(47.8 - 100)
HIV test	-	-	-	5	100	(47.8 - 100)
All lab inputs observed	-	-	-	5	80	(28.4 - 99.5)

* Blood chemistry reagents and PTT, TPT reagents data not available at baseline or first follow-up.

Table D6.12: Antenatal/postnatal care composite indicator, ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
All equipment observed and functional	67	19.4	(10.8 - 30.9)	59	81.4	(69.1 - 90.3)
All drugs observed on the day of survey	67	85.1	(74.3 - 92.6)	59	30.5	(19.2 - 43.9)
All drugs continuously available in prior three months	67	80.6	(69.1 - 89.2)	59	20.3	(11 - 32.8)
Antenatal care provided according to SMI standards	67	14.9	(7.4 - 25.7)	59	18.6	(9.7 - 30.9)

Table D6.13: Antenatal/postnatal care composite indicator, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
All equipment observed and functional	20	30	(11.9 - 54.3)	25	76.0	(54.9 - 90.6)
All drugs observed on the day of survey	20	95	(75.1 - 99.9)	25	40.0	(21.1 - 61.3)
All drugs continuously available in prior three months	20	75	(50.9 - 91.3)	25	28.0	(12.1 - 49.4)
All lab inputs observed day of survey	8	0	(0 - 36.9)	18	22.2	(6.4 - 47.6)
Antenatal care provided according to SMI standards	20	10	(1.2 - 31.7)	25	8.0	(1 - 26)

Table D6.14: Antenatal/postnatal care composite indicator, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
All equipment observed and functional	5	60	(14.7 - 94.7)	6	100.0	(54.1 - 100)
All drugs observed on the day of survey	5	80	(28.4 - 99.5)	6	66.7	(22.3 - 95.7)
All drugs continuously available in prior three months	5	60	(14.7 - 94.7)	6	33.3	(4.3 - 77.7)
All lab inputs observed day of survey	-	-	-	5	80.0	(28.4 - 99.5)
Antenatal care provided according to SMI standards	5	40	(5.3 - 85.3)	6	33.3	(4.3 - 77.7)

Table D6.15: At least four antenatal care visits to standard, ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
At least four ANC visits	81	18.5	(10.8 - 28.7)	589	8.3	(6.2 - 10.8)
All appropriate checks performed, at least four ANC visits	81	7.4	(2.8 - 15.4)	589	2.4	(1.3 - 4)
All lab tests performed at least once during pregnancy:	81	2.5	(0.3 - 8.6)	589	0.3	(0 - 1.2)
Blood group	81	2.5	(0.3 - 8.6)	589	2.0	(1.1 - 3.5)
Rh factor	81	2.5	(0.3 - 8.6)	589	2.0	(1.1 - 3.5)
Blood glucose	81	4.9	(1.4 - 12.2)	589	5.4	(3.7 - 7.6)
HIV test	81	6.2	(2 - 13.8)	589	5.3	(3.6 - 7.4)
Hemoglobin	81	4.9	(1.4 - 12.2)	589	3.7	(2.4 - 5.6)
Urinalysis	81	7.4	(2.8 - 15.4)	589	3.2	(2 - 5)
Antenatal care performed according to standard	81	2.5	(0.3 - 8.6)	589	0.0	(0 - 0.6)

Table D6.16: Timely first ANC visit, ambulatory facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
First ANC visit within 12 weeks	74	12.2	(5.7 - 21.8)	539	14.3	(11.4 - 17.5)

Figure D6.1: Histogram of first ANC visit, by collection period

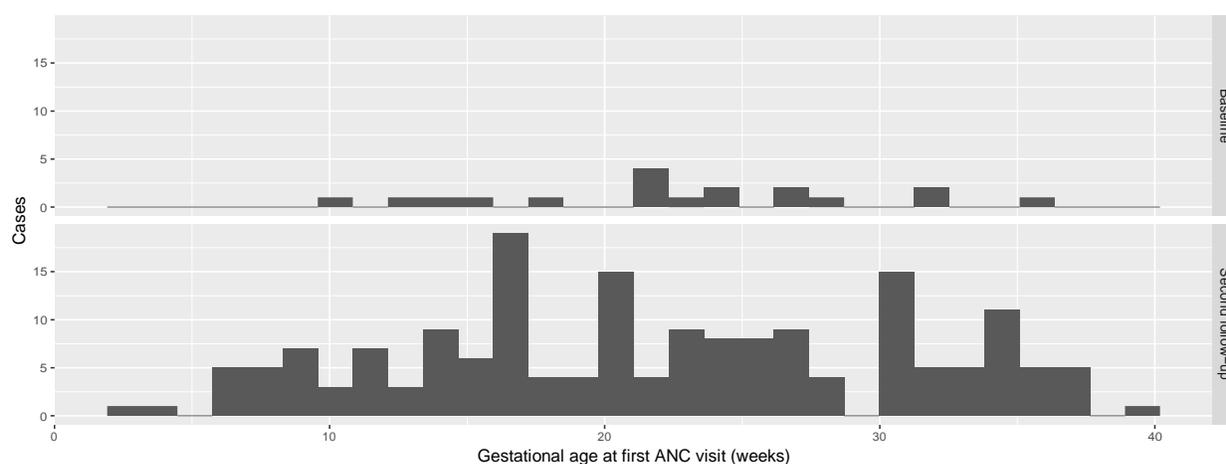


Table D6.17: Partograph revision, basic facilities

	Second Follow-Up		
	N	%	CI
Patient arrived in imminent birth or elective C-section (no partograph included)	42	9.5	(2.7 - 22.6)
Partograph included and filled out (regardless of delivery type)	38	100.0	(90.7 - 100)
If partograph filled out:			
Fetal heart rate and alert curve recorded (if dilation > 4.5 cm)	12	100.0	(73.5 - 100)
Note written within 30 minutes if fetal heart rate < 120 bpm	-	-	-
Note written within 30 minutes if alert curve surpassed	12	0.0	(0 - 26.5)
Partograph filled according to standard	42	71.4	(55.4 - 84.3)

Table D6.18: Partograph revision, complete facilities

	Second Follow-Up		
	N	%	CI
Patient arrived in imminent birth or elective C-section (no partograph included)	124	0.8	(0 - 4.4)
Partograph included and filled out (regardless of delivery type)	123	100.0	(97 - 100)
If partograph filled out:			
Fetal heart rate and alert curve recorded (if dilation > 4.5 cm)	25	92.0	(74 - 99)
Note written within 30 minutes if fetal heart rate < 120 bpm	3	0.0	(0 - 70.8)
Note written within 30 minutes if alert curve surpassed	16	0.0	(0 - 20.6)
Partograph filled according to standard	124	86.3	(79 - 91.8)

Table D6.19: Delivery management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Attended by doctor/nurse/obstetrician/midwife	106	90.6	(83.3 - 95.4)	201	97.5	(94.3 - 99.2)
Oxytocin or other uterotonic administered	106	94.3	(88.1 - 97.9)	201	99.0	(96.5 - 99.9)
Partograph included in file	106	62.3	(52.3 - 71.5)	201	98.0	(95 - 99.5)
Cord clamping for appropriate time	106	85.8	(77.7 - 91.9)	201	99.0	(96.5 - 99.9)
Delivery managed to standard	106	48.1	(38.3 - 58)	201	94.5	(90.4 - 97.2)

* At baseline and first follow-up, cord clamping time was defined at 90 seconds. At the second follow-up, it is between 2-3 minutes.

Table D6.20: Immediate maternal postpartum care, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Blood pressure	167	21.0	(15.1 - 27.9)	223	38.1	(31.7 - 44.8)
Temperature	167	19.2	(13.5 - 26)	223	29.6	(23.7 - 36.1)
Heart rate / pulse	167	18.6	(13 - 25.3)	223	35.9	(29.6 - 42.5)
Postpartum care to standard	167	18.0	(12.5 - 24.6)	223	27.8	(22 - 34.2)

* Heart rate not captured as pulse alternative at baseline.

Table D6.21: Immediate maternal postpartum care, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Checked 4 times in first hour, twice in second hour, once at discharge:						
Blood pressure	41	7.3	(1.5 - 19.9)	107	54.2	(44.3 - 63.9)
Temperature	41	7.3	(1.5 - 19.9)	107	49.5	(39.7 - 59.4)
Heart rate / pulse	41	7.3	(1.5 - 19.9)	107	48.6	(38.8 - 58.5)
Postpartum care to standard	41	7.3	(1.5 - 19.9)	107	47.7	(37.9 - 57.5)

* Heart rate not captured as pulse alternative at baseline.

Table D7.1: Emergency care services provision, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Emergency care area						
Visual and auditory privacy	20	55	(31.5 - 76.9)	25	88	(68.8 - 97.5)
Visual privacy only	20	30	(11.9 - 54.3)	25	4	(0.1 - 20.4)
Non private area	20	15	(3.2 - 37.9)	25	4	(0.1 - 20.4)
Other	20	0	(0 - 16.8)	25	0	(0 - 13.7)
Do not provide service	20	0	(0 - 16.8)	25	4	(0.1 - 20.4)

Table D7.2: Emergency care services provision, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Emergency care area						
Visual and auditory privacy	5	20	(0.5 - 71.6)	6	100	(54.1 - 100)
Visual privacy only	5	40	(5.3 - 85.3)	6	0	(0 - 45.9)
Non private area	5	40	(5.3 - 85.3)	6	0	(0 - 45.9)
Other	5	0	(0 - 52.2)	6	0	(0 - 45.9)
Do not provide service	5	0	(0 - 52.2)	6	0	(0 - 45.9)

Table D7.3: Emergency care services provision, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Blood pressure apparatus	20	65	(40.8 - 84.6)	24	87.5	(67.6 - 97.3)
Stethoscope	20	70	(45.7 - 88.1)	24	87.5	(67.6 - 97.3)
Pinard stethoscope / portable doppler	20	70	(45.7 - 88.1)	24	95.8	(78.9 - 99.9)
Heat sterilizer / autoclave	20	70	(45.7 - 88.1)	24	66.7	(44.7 - 84.4)
Oxygen tank	20	50	(27.2 - 72.8)	24	79.2	(57.8 - 92.9)
Adult resuscitation bag	20	60	(36.1 - 80.9)	24	95.8	(78.9 - 99.9)
Neonate resuscitation bag	20	50	(27.2 - 72.8)	24	91.7	(73 - 99)
Laryngoscope	20	25	(8.7 - 49.1)	24	66.7	(44.7 - 84.4)
MVA (not required at CAPs)	20	5	(0.1 - 24.9)	24	70.8	(48.9 - 87.4)
All emergency equipment observed and functional	20	10	(1.2 - 31.7)	24	41.7	(22.1 - 63.4)

* Data on heat sterilizer/autoclave not captured at one facility in the first follow-up. This piece of equipment was excluded for this facility in the final indication calculation.

Table D7.4: Emergency care services provision, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Blood pressure apparatus	5	40	(5.3 - 85.3)	6	100	(54.1 - 100)
Stethoscope	5	0	(0 - 52.2)	6	100	(54.1 - 100)
Pinard stethoscope / portable doppler	5	80	(28.4 - 99.5)	6	100	(54.1 - 100)
Heat sterilizer / autoclave	5	80	(28.4 - 99.5)	6	100	(54.1 - 100)
Oxygen tank	5	80	(28.4 - 99.5)	6	100	(54.1 - 100)
Adult resuscitation bag	5	80	(28.4 - 99.5)	6	100	(54.1 - 100)
Neonate resuscitation bag	5	80	(28.4 - 99.5)	6	100	(54.1 - 100)
Laryngoscope	5	60	(14.7 - 94.7)	6	100	(54.1 - 100)
MVA / uterine curettage kit	5	80	(28.4 - 99.5)	6	100	(54.1 - 100)
Anesthesia equipment	5	40	(5.3 - 85.3)	6	100	(54.1 - 100)
C-section equipment	5	40	(5.3 - 85.3)	6	100	(54.1 - 100)
Pediatric / neonatal stethoscope	5	20	(0.5 - 71.6)	6	100	(54.1 - 100)
All emergency equipment observed and functional	5	0	(0 - 52.2)	6	100	(54.1 - 100)

Table D7.5: Emergency care pharmacy inputs, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Oxytocin / methylergonovine	20	85	(62.1 - 96.8)	24	100.0	(85.8 - 100)
Gentamicin / amikacin	20	65	(40.8 - 84.6)	24	100.0	(85.8 - 100)
Dexamethasone / betamethasone	20	70	(45.7 - 88.1)	24	100.0	(85.8 - 100)
Metronidazole / clindamycin	20	80	(56.3 - 94.3)	24	95.8	(78.9 - 99.9)
Magnesium sulfate	20	70	(45.7 - 88.1)	24	95.8	(78.9 - 99.9)
Calcium gluconate	20	25	(8.7 - 49.1)	24	66.7	(44.7 - 84.4)
Hydralazine	20	25	(8.7 - 49.1)	24	50.0	(29.1 - 70.9)
Ampicillin / penicillin	20	80	(56.3 - 94.3)	24	95.8	(78.9 - 99.9)
All drugs observed day of evaluation	20	5	(0.1 - 24.9)	24	37.5	(18.8 - 59.4)
All drugs continuously available in past 3 months	20	0	(0 - 16.8)	24	12.5	(2.7 - 32.4)

* Stockout data not available for metronidazole, clindamycin, or calcium gluconate at baseline evaluation.

Table D7.6: Emergency care pharmacy inputs, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Oxytocin / methylegonovine	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Gentamicin / amikacin	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Dexamethasone / betamethasone	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Metronidazole / clindamycin	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Magnesium sulfate	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Calcium gluconate	5	80	(28.4 - 99.5)	6	100.0	(54.1 - 100)
Hydralazine hydrochloride	5	80	(28.4 - 99.5)	6	33.3	(4.3 - 77.7)
Ampicillin / crystal benzylpenicillin / penicillin / chloramphenicol	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Ceftriaxone	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)
Nifedipine	5	40	(5.3 - 85.3)	6	83.3	(35.9 - 99.6)
Diazepam	5	100	(47.8 - 100)	6	83.3	(35.9 - 99.6)
Diphenhydramine	5	40	(5.3 - 85.3)	6	100.0	(54.1 - 100)
All drugs observed day of evaluation	5	0	(0 - 52.2)	6	33.3	(4.3 - 77.7)
All drugs continuously available in past 3 months	5	0	(0 - 52.2)	6	0.0	(0 - 45.9)

* Stockout data not available for metronidazole, clindamycin, calcium gluconate, hydralazine hydrochloride, ceftriaxone, nifedipine, and diphenhydramine at baseline evaluation.

† Stockout data not available for hydralazine hydrochloride at first follow-up evaluation.

Table D7.7: Emergency care composite indicator, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
All equipment observed and functional	20	10	(1.2 - 31.7)	24	41.7	(22.1 - 63.4)
All drugs observed on the day of survey	20	5	(0.1 - 24.9)	24	37.5	(18.8 - 59.4)
All drugs continuously available in prior three months	20	0	(0 - 16.8)	24	12.5	(2.7 - 32.4)
Emergency care provided according to SMI standards	20	0	(0 - 16.8)	24	4.2	(0.1 - 21.1)

Table D7.8: Emergency care composite indicator, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
All equipment observed and functional	5	0	(0 - 52.2)	6	100.0	(54.1 - 100)
All drugs observed on the day of survey	5	0	(0 - 52.2)	6	33.3	(4.3 - 77.7)
All drugs continuously available in prior three months	5	0	(0 - 52.2)	6	0.0	(0 - 45.9)
Emergency care provided according to SMI standards	5	0	(0 - 52.2)	6	0.0	(0 - 45.9)

Table D7.9: Uterine tamponade balloon for hemorrhage management, second follow-up evaluation

	Basic Facilities			Complete Facilities		
	N	%	CI	N	%	CI
Facility uses tamponade to manage obstetric hemorrhage	7	14.3	(0.4 - 57.9)	3	100.0	(29.2 - 100)
Type						
Bakri	1	100.0	(2.5 - 100)	3	0.0	(0 - 70.8)
Foley catheter	1	0.0	(0 - 97.5)	3	33.3	(0.8 - 90.6)
Condom-based balloon	1	0.0	(0 - 97.5)	3	33.3	(0.8 - 90.6)
None of these	1	0.0	(0 - 97.5)	3	0.0	(0 - 70.8)
Do not know/did not respond	1	0.0	(0 - 97.5)	3	33.3	(0.8 - 90.6)
Assembly kit						
Facility has tamponade kit	1	100.0	(2.5 - 100)	2	0.0	(0 - 84.2)
Kit commercially assembled	1	0.0	(0 - 97.5)	-	-	-
Kit prepared from available materials	1	100.0	(2.5 - 100)	-	-	-
Do not know / did not respond (kit type)	1	0.0	(0 - 97.5)	-	-	-
Staff training						
Staff trained in tamponade use	8	100.0	(63.1 - 100)	3	100.0	(29.2 - 100)
Staff trained in tamponade assembly	7	85.7	(42.1 - 99.6)	3	100.0	(29.2 - 100)

* One basic facility responded 'do not know' to tamponade use and was omitted.

† Two basic facilities responded 'do not know' to staff trained in assembly and was omitted.

‡ One complete facility responded 'do not know' to kit assembly and was omitted.

Table D7.10: Distribution of obstetric complications, basic facilities

	Baseline	Second Follow-up
Sepsis	0	2
Hemorrhage	16	66
Pre-eclampsia	25	59
Eclampsia	2	4

Table D7.11: Distribution of obstetric complications, complete facilities

	Baseline	Second Follow-up
Sepsis	9	2
Hemorrhage	81	78
Pre-eclampsia	36	37
Eclampsia	12	10

Table D7.12: Distribution of neonatal complications, basic facilities

	Baseline	Second Follow-up
Sepsis	27	42
Low birth weight	7	35
Asphyxia	7	13
Prematurity	0	14

Table D7.13: Distribution of neonatal complications, complete facilities

	Baseline	Second Follow-up
Sepsis	37	45
Low birth weight	24	55
Asphyxia	36	27
Prematurity	35	64

Table D7.14: Obstetric sepsis management, basic facilities

	Second Follow-Up		
	N	%	CI
Vital signs	3	100.0	(29.2 - 100)
Pulse / heart rate	3	100.0	(29.2 - 100)
Blood pressure	3	100.0	(29.2 - 100)
Temperature	3	100.0	(29.2 - 100)
Complete blood count	-	-	-
Appropriate treatment:	2	50.0	(1.3 - 98.7)
Pelvic abscess	-	-	-
Endometritis	1	0.0	(0 - 97.5)
Puerperal fever	-	-	-
Placental retention	1	100.0	(2.5 - 100)
Sepsis management to standard	3	66.7	(9.4 - 99.2)

Table D7.15: Obstetric sepsis management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs	9	88.9	(51.8 - 99.7)	2	100	(15.8 - 100)
Pulse / heart rate	9	88.9	(51.8 - 99.7)	2	100	(15.8 - 100)
Blood pressure	9	100.0	(66.4 - 100)	2	100	(15.8 - 100)
Temperature	9	100.0	(66.4 - 100)	2	100	(15.8 - 100)
Complete blood count	9	44.4	(13.7 - 78.8)	2	50	(1.3 - 98.7)
Appropriate treatment:	5	100.0	(47.8 - 100)	-	-	-
Pelvic abscess	-	-	-	-	-	-
Endometritis	2	100.0	(15.8 - 100)	-	-	-
Puerperal fever	1	100.0	(2.5 - 100)	-	-	-
Placental retention	3	100.0	(29.2 - 100)	-	-	-
Sepsis management to standard	9	44.4	(13.7 - 78.8)	2	50	(1.3 - 98.7)

Table D7.16: Obstetric hemorrhage management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs	16	81.2	(54.4 - 96)	66	78.8	(67 - 87.9)
Pulse / heart rate	16	100.0	(79.4 - 100)	66	80.3	(68.7 - 89.1)
Blood pressure	16	81.2	(54.4 - 96)	66	84.8	(73.9 - 92.5)
Ringer's/Hartmann's/saline	16	62.5	(35.4 - 84.8)	66	92.4	(83.2 - 97.5)
Appropriate treatment:	10	80.0	(44.4 - 97.5)	59	74.6	(61.6 - 85)
Abortion	3	100.0	(29.2 - 100)	-	-	-
Ectopic pregnancy	-	-	-	-	-	-
Placenta previa	-	-	-	-	-	-
Placental detachment	-	-	-	-	-	-
Uterine atony	1	100.0	(2.5 - 100)	-	-	-
Uterine rupture	1	100.0	(2.5 - 100)	6	83.3	(35.9 - 99.6)
Uterine inversion	1	0.0	(0 - 97.5)	1	100.0	(2.5 - 100)
Retention of placental remains	4	75.0	(19.4 - 99.4)	52	73.1	(59 - 84.4)
Hemorrhage management to standard	16	43.8	(19.8 - 70.1)	66	54.5	(41.8 - 66.9)

Table D7.17: Obstetric hemorrhage management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs	81	82.7	(72.7 - 90.2)	78	87.2	(77.7 - 93.7)
Pulse / heart rate	81	92.6	(84.6 - 97.2)	78	97.4	(91 - 99.7)
Blood pressure	81	88.9	(80 - 94.8)	78	87.2	(77.7 - 93.7)
Lab tests	81	77.8	(67.2 - 86.3)	78	92.3	(84 - 97.1)
Hematocrit	81	80.2	(69.9 - 88.3)	78	94.9	(87.4 - 98.6)
Hemoglobin	81	81.5	(71.3 - 89.2)	78	94.9	(87.4 - 98.6)
Platelette count	81	77.8	(67.2 - 86.3)	78	92.3	(84 - 97.1)
Ringer's/Hartmann's/saline	81	91.4	(83 - 96.5)	78	85.9	(76.2 - 92.7)
Appropriate treatment:	81	40.7	(29.9 - 52.2)	76	36.8	(26.1 - 48.7)
Abortion	10	90.0	(55.5 - 99.7)	7	85.7	(42.1 - 99.6)
Ectopic pregnancy	-	-	-	1	0.0	(0 - 97.5)
Placenta previa	1	0.0	(0 - 97.5)	1	0.0	(0 - 97.5)
Placental detachment	1	100.0	(2.5 - 100)	-	-	-
Uterine atony	2	0.0	(0 - 84.2)	-	-	-
Uterine rupture	3	0.0	(0 - 70.8)	4	50.0	(6.8 - 93.2)
Uterine inversion	2	0.0	(0 - 84.2)	-	-	-
Retention of placental remains	67	41.8	(29.8 - 54.5)	61	32.8	(21.3 - 46)
Hemorrhage management to standard	81	23.5	(14.8 - 34.2)	78	26.9	(17.5 - 38.2)

Table D7.18: Maternal pre-eclampsia management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs	25	100	(86.3 - 100)	59	98.3	(90.9 - 100)
Pulse / heart rate	25	96	(79.6 - 99.9)	59	84.7	(73 - 92.8)
Lab tests	25	4	(0.1 - 20.4)	59	5.1	(1.1 - 14.1)
Urine protein	25	4	(0.1 - 20.4)	59	5.1	(1.1 - 14.1)
Medication administered	25	32	(14.9 - 53.5)	59	47.5	(34.3 - 60.9)
Magnesium sulfate	25	44	(24.4 - 65.1)	59	76.3	(63.4 - 86.4)
Ringer's /Hartmann's/ saline	25	36	(18 - 57.5)	59	61.0	(47.4 - 73.5)
Referred to complete	25	4	(0.1 - 20.4)	59	74.6	(61.6 - 85)
Pre-eclampsia management to standard	25	0	(0 - 13.7)	59	0.0	(0 - 6.1)

Table D7.19: Maternal pre-eclampsia management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs	36	25.0	(12.1 - 42.2)	37	24.3	(11.8 - 41.2)
Respiratory rate	36	91.7	(77.5 - 98.2)	37	89.2	(74.6 - 97)
Pulse / heart rate	36	97.2	(85.5 - 99.9)	37	100.0	(90.5 - 100)
Blood pressure	36	100.0	(90.3 - 100)	37	100.0	(90.5 - 100)
Patellar reflex	36	25.0	(12.1 - 42.2)	37	24.3	(11.8 - 41.2)
Lab tests	36	13.9	(4.7 - 29.5)	37	24.3	(11.8 - 41.2)
Urine protein	36	33.3	(18.6 - 51)	37	45.9	(29.5 - 63.1)
Platelets	36	72.2	(54.8 - 85.8)	37	91.9	(78.1 - 98.3)
Creatinine	36	77.8	(60.8 - 89.9)	37	89.2	(74.6 - 97)
Uric acid	36	69.4	(51.9 - 83.7)	37	73.0	(55.9 - 86.2)
Aspartate aminotransferase / glutamate oxaloacetate transaminase	36	41.7	(25.5 - 59.2)	37	81.1	(64.8 - 92)
Alanine aminotransferase / glutamate-pyruvate transaminase	36	38.9	(23.1 - 56.5)	37	83.8	(68 - 93.8)
Lactate dehydrogenase	36	58.3	(40.8 - 74.5)	37	45.9	(29.5 - 63.1)
Medication administered	36	11.1	(3.1 - 26.1)	37	5.4	(0.7 - 18.2)
Magnesium sulfate	36	69.4	(51.9 - 83.7)	37	89.2	(74.6 - 97)
Hydralazine / nifedipine (if sist. \geq 160 or dias. \geq 110)	-	-	-	2	50.0	(1.3 - 98.7)
Dexamethasone / betamethasone (if gest age 24-35 weeks)	33	9.1	(1.9 - 24.3)	34	0.0	(0 - 10.3)
Pre-eclampsia management to standard	36	0.0	(0 - 9.7)	37	0.0	(0 - 9.5)

Table D7.20: Maternal eclampsia management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs	2	100	(15.8 - 100)	4	100	(39.8 - 100)
Pulse / heart rate	2	100	(15.8 - 100)	4	75	(19.4 - 99.4)
Lab tests	2	50	(1.3 - 98.7)	4	25	(0.6 - 80.6)
Urine protein	2	50	(1.3 - 98.7)	4	25	(0.6 - 80.6)
Medication administered	2	100	(15.8 - 100)	4	75	(19.4 - 99.4)
Magnesium sulfate	2	100	(15.8 - 100)	4	100	(39.8 - 100)
Ringer's /Hartmann's/ saline	2	100	(15.8 - 100)	4	75	(19.4 - 99.4)
Referred to complete	2	0	(0 - 84.2)	4	50	(6.8 - 93.2)
Pre-eclampsia management to standard	2	0	(0 - 84.2)	4	0	(0 - 60.2)

Table D7.21: Maternal eclampsia management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs	12	25.0	(5.5 - 57.2)	10	40	(12.2 - 73.8)
Respiratory rate	12	100.0	(73.5 - 100)	10	70	(34.8 - 93.3)
Pulse / heart rate	12	100.0	(73.5 - 100)	10	80	(44.4 - 97.5)
Blood pressure	12	100.0	(73.5 - 100)	10	80	(44.4 - 97.5)
Patellar reflex	12	25.0	(5.5 - 57.2)	10	40	(12.2 - 73.8)
Lab tests	12	8.3	(0.2 - 38.5)	10	40	(12.2 - 73.8)
Urine protein	12	25.0	(5.5 - 57.2)	10	70	(34.8 - 93.3)
Platelets	12	83.3	(51.6 - 97.9)	10	100	(69.2 - 100)
Creatinine	12	58.3	(27.7 - 84.8)	10	90	(55.5 - 99.7)
Uric acid	12	66.7	(34.9 - 90.1)	10	60	(26.2 - 87.8)
Aspartate aminotransferase / glutamate oxaloacetate transaminase	12	41.7	(15.2 - 72.3)	10	70	(34.8 - 93.3)
Alanine aminotransferase / glutamate-pyruvate transaminase	12	41.7	(15.2 - 72.3)	10	70	(34.8 - 93.3)
Lactate dehydrogenase	12	33.3	(9.9 - 65.1)	10	70	(34.8 - 93.3)
Medication administered	12	0.0	(0 - 26.5)	10	0	(0 - 30.8)
Magnesium sulfate	12	75.0	(42.8 - 94.5)	10	90	(55.5 - 99.7)
Hydralazine / nifedipine (if sist. >= 160 or dias. >= 110)	2	100.0	(15.8 - 100)	3	100	(29.2 - 100)
Dexamethasone / betamethasone (if gest age 24-35 weeks)	10	0.0	(0 - 30.8)	10	0	(0 - 30.8)
Pre-eclampsia management to standard	12	0.0	(0 - 26.5)	10	0	(0 - 30.8)

Table D7.22: Obstetric complications management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs	2	100	(15.8 - 100)	3	66.7	(9.4 - 99.2)
Respiratory rate	2	100	(15.8 - 100)	66	54.5	(41.8 - 66.9)
Pulse / heart rate	2	100	(15.8 - 100)	59	0.0	(0 - 6.1)
Blood pressure	2	100	(15.8 - 100)	4	0.0	(0 - 60.2)
Patellar reflex	2	0	(0 - 84.2)	131	28.2	(20.7 - 36.8)
Lab tests	2	50	(1.3 - 98.7)	3	66.7	(9.4 - 99.2)
Urine protein	2	50	(1.3 - 98.7)	66	54.5	(41.8 - 66.9)
Platelets	2	100	(15.8 - 100)	59	0.0	(0 - 6.1)
Creatinine	2	100	(15.8 - 100)	4	0.0	(0 - 60.2)
Uric acid	2	50	(1.3 - 98.7)	131	28.2	(20.7 - 36.8)
Aspartate aminotransferase / glutamate oxaloacetate transaminase	2	100	(15.8 - 100)	3	66.7	(9.4 - 99.2)
Alanine aminotransferase / glutamate-pyruvate transaminase	2	100	(15.8 - 100)	66	54.5	(41.8 - 66.9)
Lactate dehydrogenase	2	100	(15.8 - 100)	59	0.0	(0 - 6.1)
Medication administered	2	100	(15.8 - 100)	4	0.0	(0 - 60.2)
Magnesium sulfate	2	100	(15.8 - 100)	131	28.2	(20.7 - 36.8)
Ringer's / Hartmann's / saline	2	100	(15.8 - 100)	3	66.7	(9.4 - 99.2)
Hydralazine / nifedipine (if sist. >= 160 or dias. >= 110)	-	-	-	66	54.5	(41.8 - 66.9)
Dexamethasone / betamethasone (if gest age 24-35 weeks)	-	-	-	59	0.0	(0 - 6.1)
Referred to complete	2	0	(0 - 84.2)	4	0.0	(0 - 60.2)
Pre-eclampsia management to standard	2	0	(0 - 84.2)	131	28.2	(20.7 - 36.8)

Table D7.23: Obstetric complications management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs	12	25.0	(5.5 - 57.2)	2	50.0	(1.3 - 98.7)
Respiratory rate	12	100.0	(73.5 - 100)	78	26.9	(17.5 - 38.2)
Pulse / heart rate	12	100.0	(73.5 - 100)	37	0.0	(0 - 9.5)
Blood pressure	12	100.0	(73.5 - 100)	10	0.0	(0 - 30.8)
Patellar reflex	12	25.0	(5.5 - 57.2)	127	17.3	(11.2 - 25)
Lab tests	12	8.3	(0.2 - 38.5)	2	50.0	(1.3 - 98.7)
Urine protein	12	25.0	(5.5 - 57.2)	78	26.9	(17.5 - 38.2)
Platelets	12	83.3	(51.6 - 97.9)	37	0.0	(0 - 9.5)
Creatinine	12	58.3	(27.7 - 84.8)	10	0.0	(0 - 30.8)
Uric acid	12	66.7	(34.9 - 90.1)	127	17.3	(11.2 - 25)
Aspartate aminotransferase / glutamate oxaloacetate transaminase	12	41.7	(15.2 - 72.3)	2	50.0	(1.3 - 98.7)
Alanine aminotransferase / glutamate-pyruvate transaminase	12	41.7	(15.2 - 72.3)	78	26.9	(17.5 - 38.2)
Lactate dehydrogenase	12	33.3	(9.9 - 65.1)	37	0.0	(0 - 9.5)
Medication administered	12	0.0	(0 - 26.5)	10	0.0	(0 - 30.8)
Magnesium sulfate	12	75.0	(42.8 - 94.5)	127	17.3	(11.2 - 25)
Ringer's /Hartmann's/ saline	12	83.3	(51.6 - 97.9)	2	50.0	(1.3 - 98.7)
Hydralazine / nifedipine (if sist. >= 160 or dias. >= 110)	2	100.0	(15.8 - 100)	78	26.9	(17.5 - 38.2)
Dexamethasone / betamethasone (if gest age 24-35 weeks)	10	0.0	(0 - 30.8)	37	0.0	(0 - 9.5)
Referred to complete	-	-	-	10	0.0	(0 - 30.8)
Pre-eclampsia management to standard	12	0.0	(0 - 26.5)	127	17.3	(11.2 - 25)

Table D7.24: Neonatal sepsis management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	27	88.9	(70.8 - 97.6)	42	71.4	(55.4 - 84.3)
Pulse / heart rate	27	100.0	(87.2 - 100)	42	81.0	(65.9 - 91.4)
Respiratory rate	27	88.9	(70.8 - 97.6)	42	76.2	(60.5 - 87.9)
Temperature	27	100.0	(87.2 - 100)	42	85.7	(71.5 - 94.6)
Antibiotics administered	27	85.2	(66.3 - 95.8)	42	59.5	(43.3 - 74.4)
Evaluated by doctor or nurse	27	70.4	(49.8 - 86.2)	42	57.1	(41 - 72.3)
Referred to complete facility	27	0.0	(0 - 12.8)	42	42.9	(27.7 - 59)
Sepsis treated according to standard	27	0.0	(0 - 12.8)	42	4.8	(0.6 - 16.2)

Table D7.25: Neonatal sepsis management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	37	83.8	(68 - 93.8)	45	71.1	(55.7 - 83.6)
Pulse / heart rate	37	86.5	(71.2 - 95.5)	45	88.9	(75.9 - 96.3)
Respiratory rate	37	86.5	(71.2 - 95.5)	45	80.0	(65.4 - 90.4)
Temperature	37	94.6	(81.8 - 99.3)	45	93.3	(81.7 - 98.6)
Lab tests performed	37	0.0	(0 - 9.5)	45	0.0	(0 - 7.9)
Oxygen saturation	37	16.2	(6.2 - 32)	45	22.2	(11.2 - 37.1)
Blood biometry	37	73.0	(55.9 - 86.2)	45	55.6	(40 - 70.4)
Hemoculture	37	0.0	(0 - 9.5)	45	2.2	(0.1 - 11.8)
C-reactive protein	37	37.8	(22.5 - 55.2)	45	60.0	(44.3 - 74.3)
Antibiotics administered	37	97.3	(85.8 - 99.9)	45	97.8	(88.2 - 99.9)
Evaluated by specialist	37	81.1	(64.8 - 92)	45	55.6	(40 - 70.4)
Sepsis treated according to standard	37	0.0	(0 - 9.5)	45	0.0	(0 - 7.9)

Table D7.26: Neonatal asphyxia management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	7	85.7	(42.1 - 99.6)	13	38.5	(13.9 - 68.4)
Pulse / heart rate	7	100.0	(59 - 100)	13	61.5	(31.6 - 86.1)
Respiratory rate	7	100.0	(59 - 100)	13	53.8	(25.1 - 80.8)
APGAR score at 1 minute	7	85.7	(42.1 - 99.6)	13	84.6	(54.6 - 98.1)
APGAR score at 5 minutes	7	85.7	(42.1 - 99.6)	13	84.6	(54.6 - 98.1)
Heat application	7	100.0	(59 - 100)	13	69.2	(38.6 - 90.9)
Evaluated by doctor or nurse	7	100.0	(59 - 100)	13	69.2	(38.6 - 90.9)
Oxygen application (if severe)	-	-	-	-	-	-
Referred to complete facility (if severe)	-	-	-	-	-	-
Asphyxia treated according to standard	7	85.7	(42.1 - 99.6)	13	30.8	(9.1 - 61.4)

Table D7.27: Neonatal asphyxia management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	36	72.2	(54.8 - 85.8)	26	65.4	(44.3 - 82.8)
Pulse / heart rate	36	91.7	(77.5 - 98.2)	26	92.3	(74.9 - 99.1)
Respiratory rate	36	77.8	(60.8 - 89.9)	26	73.1	(52.2 - 88.4)
APGAR score at 1 minute	36	86.1	(70.5 - 95.3)	26	92.3	(74.9 - 99.1)
APGAR score at 5 minutes	36	88.9	(73.9 - 96.9)	26	92.3	(74.9 - 99.1)
Oxygen saturation lab test	36	83.3	(67.2 - 93.6)	26	38.5	(20.2 - 59.4)
Heat application	36	94.4	(81.3 - 99.3)	26	100.0	(86.8 - 100)
Evaluated by doctor or nurse	36	88.9	(73.9 - 96.9)	26	92.3	(74.9 - 99.1)
Evaluated by specialist	36	88.9	(73.9 - 96.9)	26	92.3	(74.9 - 99.1)
Oxygen application (if severe)	1	100.0	(2.5 - 100)	-	-	-
Other procedures (if severe)	1	0.0	(0 - 97.5)	-	-	-
Referred to complete facility (if severe)	-	-	-	-	-	-
Asphyxia treated according to standard	36	47.2	(30.4 - 64.5)	26	23.1	(9 - 43.6)

Table D7.28: Neonatal low birth weight management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Gestational age calculated using Capurro/Ballard	7	28.6	(3.7 - 71)	35	80.0	(63.1 - 91.6)
Classification based on gestational age	7	71.4	(29 - 96.3)	35	91.4	(76.9 - 98.2)
Vital signs checked	7	28.6	(3.7 - 71)	35	40.0	(23.9 - 57.9)
Pulse / heart rate	7	100.0	(59 - 100)	35	65.7	(47.8 - 80.9)
Respiratory rate	7	85.7	(42.1 - 99.6)	35	77.1	(59.9 - 89.6)
Weight	7	85.7	(42.1 - 99.6)	35	97.1	(85.1 - 99.9)
Silverman score	7	0.0	(0 - 41)	35	20.0	(8.4 - 36.9)
Head circumference	7	28.6	(3.7 - 71)	35	74.3	(56.7 - 87.5)
APGAR at 1 or 5 minutes	7	71.4	(29 - 96.3)	35	68.6	(50.7 - 83.1)
Heat application	7	100.0	(59 - 100)	35	62.9	(44.9 - 78.5)
Fed glucose	7	100.0	(59 - 100)	35	74.3	(56.7 - 87.5)
Evaluated by doctor or nurse	7	71.4	(29 - 96.3)	35	91.4	(76.9 - 98.2)
Referred to complete facility (if gest age <=34 weeks or complications)	1	0.0	(0 - 97.5)	14	57.1	(28.9 - 82.3)
Appropriate treatment:	-	-	-	-	-	-
Pneumonia	-	-	-	-	-	-
Diarrhea	-	-	-	-	-	-
Hypoglycemia	-	-	-	-	-	-
Low birth weight treated according to standard	7	14.3	(0.4 - 57.9)	35	11.4	(3.2 - 26.7)

Table D7.29: Neonatal low birth weight management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Gestational age calculated using Capurro/Ballard	24	79.2	(57.8 - 92.9)	55	80.0	(67 - 89.6)
Classification based on gestational age	24	75.0	(53.3 - 90.2)	55	89.1	(77.8 - 95.9)
Vital signs checked	24	54.2	(32.8 - 74.4)	55	56.4	(42.3 - 69.7)
Pulse / heart rate	24	83.3	(62.6 - 95.3)	55	96.4	(87.5 - 99.6)
Respiratory rate	24	79.2	(57.8 - 92.9)	55	83.6	(71.2 - 92.2)
Weight	24	100.0	(85.8 - 100)	55	96.4	(87.5 - 99.6)
Silverman score	24	12.5	(2.7 - 32.4)	55	25.5	(14.7 - 39)
Head circumference	24	75.0	(53.3 - 90.2)	55	83.6	(71.2 - 92.2)
APGAR at 1 or 5 minutes	24	83.3	(62.6 - 95.3)	55	78.2	(65 - 88.2)
Lab tests performed	24	12.5	(2.7 - 32.4)	55	29.1	(17.6 - 42.9)
Oxygen saturation	24	45.8	(25.6 - 67.2)	55	30.9	(19.1 - 44.8)
Glycemia	24	25.0	(9.8 - 46.7)	55	54.5	(40.6 - 68)
Heat application	24	91.7	(73 - 99)	55	85.5	(73.3 - 93.5)
Fed glucose	24	75.0	(53.3 - 90.2)	55	70.9	(57.1 - 82.4)
Evaluated by specialist	24	75.0	(53.3 - 90.2)	55	52.7	(38.8 - 66.3)
Appropriate treatment:	5	80.0	(28.4 - 99.5)	6	100.0	(54.1 - 100)
Pneumonia	5	80.0	(28.4 - 99.5)	6	100.0	(54.1 - 100)
Diarrhea	-	-	-	-	-	-
Hypoglycemia	-	-	-	-	-	-
Low birth weight treated according to standard	24	0.0	(0 - 14.2)	55	12.7	(5.3 - 24.5)

Table D7.30: Neonatal prematurity management, basic facilities

	Second Follow-Up		
	N	%	CI
Gestational age calculated using Capurro/Ballard	14	57.1	(28.9 - 82.3)
Classification based on gestational age	14	50.0	(23 - 77)
Vital signs checked	14	0.0	(0 - 23.2)
Pulse / heart rate	14	42.9	(17.7 - 71.1)
Respiratory rate	14	42.9	(17.7 - 71.1)
Weight	14	100.0	(76.8 - 100)
Silverman score	14	0.0	(0 - 23.2)
Head circumference	14	78.6	(49.2 - 95.3)
APGAR at 1 or 5 minutes	14	71.4	(41.9 - 91.6)
Heat application	14	28.6	(8.4 - 58.1)
Fed glucose	14	50.0	(23 - 77)
Evaluated by doctor or nurse	14	85.7	(57.2 - 98.2)
Referred to complete facility (if gest age <=34 weeks or complications)	7	57.1	(18.4 - 90.1)
Appropriate treatment:	-	-	-
Pneumonia	-	-	-
Diarrhea	-	-	-
Hypoglycemia	-	-	-
Prematurity treated according to standard	14	0.0	(0 - 23.2)

Table D7.31: Neonatal prematurity management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Gestational age calculated using Capurro/Ballard	35	74.3	(56.7 - 87.5)	63	87.3	(76.5 - 94.4)
Classification based on gestational age	35	85.7	(69.7 - 95.2)	63	87.3	(76.5 - 94.4)
Vital signs checked	35	5.7	(0.7 - 19.2)	63	41.3	(29 - 54.4)
Pulse / heart rate	35	94.3	(80.8 - 99.3)	63	96.8	(89 - 99.6)
Respiratory rate	35	88.6	(73.3 - 96.8)	63	82.5	(70.9 - 90.9)
Weight	35	85.7	(69.7 - 95.2)	63	98.4	(91.5 - 100)
Silverman score	35	8.6	(1.8 - 23.1)	63	41.3	(29 - 54.4)
Head circumference	35	54.3	(36.6 - 71.2)	63	88.9	(78.4 - 95.4)
APGAR at 1 or 5 minutes	35	71.4	(53.7 - 85.4)	63	82.5	(70.9 - 90.9)
Lab tests performed	35	8.6	(1.8 - 23.1)	63	27.0	(16.6 - 39.7)
Oxygen saturation	35	25.7	(12.5 - 43.3)	63	33.3	(22 - 46.3)
Glycemia	35	17.1	(6.6 - 33.6)	63	61.9	(48.8 - 73.9)
Heat application	35	94.3	(80.8 - 99.3)	63	90.5	(80.4 - 96.4)
Fed glucose	35	54.3	(36.6 - 71.2)	63	65.1	(52 - 76.7)
Evaluated by specialist	35	85.7	(69.7 - 95.2)	63	54.0	(40.9 - 66.6)
Appropriate treatment:	8	87.5	(47.3 - 99.7)	17	100.0	(80.5 - 100)
Pneumonia	8	87.5	(47.3 - 99.7)	17	100.0	(80.5 - 100)
Diarrhea	-	-	-	-	-	-
Hypoglycemia	-	-	-	-	-	-
Prematurity treated according to standard	35	0.0	(0 - 10)	63	4.8	(1 - 13.3)

Table D7.32: Neonatal complications management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Sepsis managed according to SMI standard	27	0.0	(0 - 12.8)	42	4.8	(0.6 - 16.2)
Asphyxia managed according to SMI standard	7	85.7	(42.1 - 99.6)	13	30.8	(9.1 - 61.4)
Low birth weight managed according to SMI standard	7	14.3	(0.4 - 57.9)	35	11.4	(3.2 - 26.7)
Prematurity managed according to SMI standard	-	-	-	14	0.0	(0 - 23.2)
Complications managed according to SMI standard	39	15.4	(5.9 - 30.5)	98	10.2	(5 - 18)

Table D7.33: Neonatal complications management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Sepsis managed according to SMI standard	37	0.0	(0 - 9.5)	45	0.0	(0 - 7.9)
Asphyxia managed according to SMI standard	36	47.2	(30.4 - 64.5)	26	23.1	(9 - 43.6)
Low birth weight managed according to SMI standard	24	0.0	(0 - 14.2)	55	12.7	(5.3 - 24.5)
Prematurity managed according to SMI standard	35	0.0	(0 - 10)	63	4.8	(1 - 13.3)
Complications managed according to SMI standard	127	13.4	(8 - 20.6)	167	7.2	(3.8 - 12.2)

Table D8.1: Infection control and disposal, ambulatory facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Incinerator at facility	68	5.9	(1.6 - 14.4)	58	3.4	(0.4 - 11.9)
Contract with other facility for disposal (if no incinerator)	62	41.9	(29.5 - 55.2)	58	1.7	(0 - 9.2)
Manual for decontamination	66	9.1	(3.4 - 18.7)	60	11.7	(4.8 - 22.6)

* Two facilities at second follow-up indicated 'do not know' to available incinerator at second follow-up and were excluded.

† One facility indicated 'do not know' to decontamination manual at first follow-up and was excluded.

‡ One facility indicated 'do not know' to decontamination manual, and two others indicated 'do not know' to contracting out at baseline evaluation. These are excluded.

Table D8.2: Infection control and disposal, basic facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Incinerator at facility	20	0	(0 - 16.8)	25	8.0	(1 - 26)
Contract with other facility for disposal (if no incinerator)	20	45	(23.1 - 68.5)	23	34.8	(16.4 - 57.3)
Manual for decontamination	20	55	(31.5 - 76.9)	25	76.0	(54.9 - 90.6)

* One facility indicated 'do not know' to decontamination manual at first follow-up and was excluded.

Table D8.3: Infection control and disposal, complete facilities

	Baseline			2nd Follow-Up		
	N	%	CI	N	%	CI
Incinerator at facility	5	60	(14.7 - 94.7)	6	33.3	(4.3 - 77.7)
Contract with other facility for disposal (if no incinerator)	2	100	(15.8 - 100)	4	100.0	(39.8 - 100)
Manual for decontamination	5	100	(47.8 - 100)	6	100.0	(54.1 - 100)

Appendix E: Indicator Definitions

8.2 Performance indicators

4050: Postpartum patients who were evaluated and registered for appropriate care post-delivery in clinical records in the last two years

Denominator:

Total number of postpartum records at basic and complete facilities

Formula:

Basic & Complete: Observe the following in the record: Woman was checked for blood pressure + temperature + heart rate/pulse four times in the first hour after delivery, twice in the second hour, and once at discharge.

4660: Delivery patients who received appropriate delivery management in the last two years

Denominator:

Total number of delivery records at basic facilities

Formula:

Basic: Observe the following in the record: Attended by doctor / nurse / obstetrician + administration of oxytocin or other uterotonic + partograph included in the medical record + cord clamping occurs between 2-3 minutes after delivery

4070: Neonatal complications (low birth weight, prematurity, asphyxia, and sepsis) managed according to the norm in the last two years

Denominator:

Total number of records of neonates with birth complications (prematurity, low birth weight, birth asphyxia, or sepsis) in the sample at basic & complete facilities

Formula:

Prematurity: excluding neonates with gestational age ≥ 37 weeks

Basic:

Observe the following in the record: Weight + Pulse/heart rate + Respiratory rate + Head circumference + APGAR at 1 or 5 minutes + Silverman score + Gestational age calculated using Capurro/Ballard method + Classification according to gestational age (if neonate was born in the facility) + Glycemia lab test + Heat application + Breastfed or given glucose + Evaluated by doctor + referred to a complete facility if associated complications (pneumonia, diarrhea, seizures, and hypoglycemia) arose or gestational age ≤ 34 weeks

Complete:

Observe the following in the record: Weight + Pulse/heart rate + Respiratory rate + Head circumference + APGAR at 1 or 5 minutes + Silverman score + Gestational age calculated using Capurro/Ballard method + Classification according to gestational age (if neonate was born in the facility) + Glycemia lab test + Oxygen saturation + Heat application + Breastfed or given glucose + Evaluated by specialist + appropriate management for any complications due to prematurity:

- if pneumonia: antibiotics
- if diarrhea: IV solution + antibiotics
- if seizures: anticonvulsants
- if hypoglycemia: glucose IV

Low birth weight:

Basic:

Observe the following in the record: Weight + Pulse/heart rate + Respiratory rate + Head circumference + Silverman score + APGAR at 1 or 5 minutes + Gestational age calculated using Capurro/Ballard method + Classification according to weight + Oxygen saturation + Heat application + Breastfed or given glucose + Evaluated by doctor/nurse + referred to a complete facility if associated complications (pneumonia, diarrhea, seizures, and hypoglycemia) arose or weight <1500 gr

Complete:

Observe the following in the record: Weight + Pulse/heart rate + Respiratory rate + Head circumference + Silverman score + APGAR at 1 or 5 minutes + Gestational age calculated using Capurro/Ballard method + Classification according to weight + Oxygen saturation + Heat application + Breastfed or given glucose + Evaluated by specialist + appropriate management for any complications due to low birth weight:

- if pneumonia: antibiotics
- if diarrhea: IV solution + antibiotics
- if seizures: anticonvulsants
- if hypoglycemia: glucose IV

Asphyxia:

Basic:

Observe the following in the record: Pulse/heart rate + Respiratory rate + APGAR score at one minute + APGAR score at five minutes + Heat application + Evaluated by doctor/nurse (if basic facility) or specialist (if complete facility) + Oxygen application (if APGAR \leq 3 at five minutes) + Referral to complete facility (if APGAR \leq 3 at five minutes)

Complete:

Observe the following in the record: Pulse/heart rate + Respiratory rate + APGAR score at one minute + APGAR score at five minutes + oxygen saturation lab test + Heat application + Evaluated by doctor/nurse

(if basic facility) or specialist (if complete facility) + Oxygen application (if APGAR \leq 3 at five minutes) + AMBU / positive pressure ventilation / endotracheal intubation / chest compressions (if APGAR \leq 3 at five minutes)

Sepsis:

Basic:

Observe the following in the record: Pulse/heart rate + Respiratory rate + Temperature + Administered antibiotics + Referral to complete facility + Evaluated by doctor/nurse

Complete: Observe the following in the record: Pulse/heart rate + Respiratory rate + Temperature + Administered antibiotics + Oxygen saturation + Complete blood test (or hemoglobin + hematocrit + platelets + leukocyte) + C-reactive protein + Evaluated by specialist

4080: Women with obstetric complications (sepsis, hemorrhage, severe pre-eclampsia, and eclampsia) managed according to the norm in the last two years

Denominator:

Total number of records of women with maternal complications (hemorrhage, severe pre-eclampsia, eclampsia, or sepsis) in the sample at basic & complete facilities.

Formula:

Sepsis:

Basic:

Observe the following in the record: Pulse/heart rate + Blood pressure + Temperature + Appropriate care for any of the sepsis cause scenarios:

- If pelvic abscess: antibiotic administration + laparotomy or drainage or hysterectomy or surgical repair or referred to complete facility
- If retained product: antibiotic administration + instrumental curettage or manual vacuum aspiration or laparotomy or hysterectomy or referred to complete facility
- If puerperal fever: antibiotic administration + referred to complete facility
- If postpartum endometritis: antibiotic administration + referred to complete facility

Complete:

Observe the following in the record: Pulse/heart rate + Blood pressure + Temperature + Complete blood test (or hemoglobin + hematocrit + platelets + leukocyte) + Appropriate care for any of the sepsis cause scenarios:

- If pelvic abscess: antibiotic administration + laparotomy or drainage or hysterectomy or surgical repair
- If retained product: antibiotic administration + instrumental curettage or manual vacuum aspiration or laparotomy or hysterectomy

- If puerperal fever: antibiotic administration
- If postpartum endometritis: antibiotic administration

Hemorrhage:

Basic:

Observe the following in the record: Pulse/heart rate + Blood pressure + Ringer's lactate / Hartmann's solution / saline solution + appropriate care for any of the hemorrhage cause scenarios detailed in the SMI complications indicator:

- If hemorrhage following incomplete or complete abortion: MVA or instrumental curettage or referred to complete facility
- If ectopic pregnancy: laparotomy or salpingectomy or surgical repair or hysterectomy or referred to complete facility
- If placenta previa with hemorrhage: C-section or referred to complete facility
- If placental abruption: Vaginal birth or C-section or referred to complete facility
- If uterine rupture: laparotomy or surgical repair or hysterectomy or referred to complete facility
- If uterine atony: uterotonics + bimanual compression or uterine massage or aortic compression or uterine tamponade (hydrostatic balloon) or compressive suture or hysterectomy or referred to complete facility
- If placental retention or placental remains or placental accretion: uterotonics + manual extraction or curettage or laparotomy or hysterectomy or referred to complete facility
- If uterine inversion: uterotonics + repositioning of the uterus with anesthesia or sedation (nonsurgical procedures or surgical procedures) or referred to complete facility

Complete:

Observe the following in the record: Pulse/heart rate + Blood pressure + Hematocrit lab test + Hemoglobin lab test + Platelet count lab test + Ringer's lactate / Hartmann's solution / saline solution + appropriate care for any of the hemorrhage cause scenarios detailed in the SMI complications indicator:

- If hemorrhage following incomplete or complete abortion: MVA or instrumental curettage
- If ectopic pregnancy: laparotomy or salpingectomy or surgical repair or hysterectomy
- If placenta previa with hemorrhage: C-section
- If placental abruption: Vaginal birth or C-section
- If uterine rupture: laparotomy or surgical repair or hysterectomy
- If uterine atony: uterotonics + bimanual compression or uterine massage or aortic compression or uterine tamponade (hydrostatic balloon) or compressive suture or hysterectomy
- If placental retention or placental remains or placental accretion: uterotonics + manual extraction or curettage or laparotomy or hysterectomy

- If uterine inversion: uterotonics + repositioning of the uterus with anesthesia or sedation (nonsurgical procedures or surgical procedures)

Pre-Eclampsia and Eclampsia

Basic:

Observe the following in the record: Blood pressure + Urine protein + Magnesium sulfate + Ringer's lactate / Hartmann's solution / saline solution + Referred to complete facility

Complete:

Observe the following in the record: Blood pressure + Patellar reflex + Pulse/heart rate + Respiratory rate + Urine protein + Platelet count + Creatine + Uric acid + Aspartate aminotransferase/Glutamic-oxalacetic transaminase (GOT) + Alanine transaminase/Glutamic-pyruvic transaminase (GPT) + Lactate dehydrogenase + Magnesium sulfate + Hydralazine/labetalol/nifedipine (if diastolic blood pressure > 110 at first checkup) + Dexamethasone/Betamethasone (if gestational age 24 - 35 weeks)

8.3 Monitoring indicators

3030: Women of reproductive age who received at least four antenatal care (ANC) visits to standard for their most recent pregnancy in the last two years and attended a health facility for antenatal care

Denominator:

Total number of ANC records at ambulatory facilities in the last two years

Formula:

Ambulatory: Observe the following in the record: woman had at least 4 ANC visits + physical checkups performed at each visit (weight + blood pressure + fundal height (if gestational age >20 weeks) + fetal heart rate (if gestational age >20 weeks) + fetal movement (if gestational age >20 weeks)). Lab tests performed at least once: blood glucose level + HIV test + Hb level + urinalysis + Rh factor + blood group + VDRL

3040: Women of reproductive age who attended their first antenatal care (ANC) visit before 12 weeks gestation in the last two years

Denominator:

Total number of antenatal care records in the sample at ambulatory facilities.

Formula:

Ambulatory: Observe the following in the record: woman had the first ANC at <=12 weeks gestation

4060: Partograph completion for uncomplicated deliveries in last two years

Denominator:

Total number of delivery records at basic and complete facilities, excluding women who arrived for elective c-section or imminent birth (unless partograph included)

Formula:

Basic & Complete: Observe the following in the record: Partograph included and filled out + Alert curve and fetal heart rate recorded (if dilation >4.5cm) + Note exists within 30 minutes if alert curve surpassed + note exists within 30 minutes if fetal heart rate < 110 bpm

7010: Child care services

Denominator:

Total number of facilities that provide child care services

Formula:

Ambulatory:

Observe the following in the facility: Scale / children's scale + height rod + stethoscope / pediatric stethoscope + thermometer + continuous three month supply of the following drugs: oral rehydration salts + micronutrients/ferrous sulfate + zinc sulfate/zinc gluconate + albendazole/mebendazole + amoxicillin/erythromycin/benzylpenicillin (if doctor on staff) + continuous three month supply of the following vaccines: Pentavalent / (DPT + HepB + HiB) + Polio + MMR + Rotavirus + Pneumococcal conjugate + BCG

Basic:

Observe the following in the facility: Scale / children's scale + height rod + pediatric scale + pediatric stethoscope + blood pressure apparatus / pediatric sphygmomanometer + continuous three month supply of the following drugs: oral rehydration salts + micronutrients/ferrous sulfate + zinc sulfate/zinc gluconate + albendazole/mebendazole + amoxicillin/erythromycin/benzylpenicillin + Ringer's lactate/Hartmann's solution/saline solution + continuous three month supply of the following vaccines: Pentavalent / (DPT + HepB + HiB) + Polio + MMR + Rotavirus + Pneumococcal conjugate + BCG

Complete:

Observe the following in the facility: Scale / children's scale + height rod + pediatric scale + pediatric stethoscope + blood pressure apparatus / pediatric sphygmomanometer + continuous three month supply of the following drugs: oral rehydration salts + micronutrients/ferrous sulfate + zinc sulfate/zinc gluconate + albendazole/mebendazole + amoxicillin/erythromycin/benzylpenicillin + Ringer's lactate/Hartmann's solution/saline solution/Dextrose 5% + continuous three month supply of the following vaccines: Pentavalent / (DPT + HepB + HiB) + Polio + MMR + Rotavirus + Pneumococcal conjugate + BCG

7020: Antenatal/postnatal care services

Denominator:

Total number of facilities that provide pre/postnatal care services

Formula:

Ambulatory:

Observe the following in the facility: scale + height rod + gynecological table / stretcher + CLAP obstetric tape / measuring tape + lamp + sphygmomanometer + stethoscope + prenatal maternal medical history forms + continuous three month supply of the following drugs: folic acid + iron / multivitamin + tetanus vaccine

Basic:

Observe the following in the facility: scale + height rod + gynecological table / stretcher + CLAP obstetric tape / measuring tape + lamp + sphygmomanometer + stethoscope + prenatal maternal medical history forms + continuous three month supply of the following drugs: folic acid + iron / multivitamin + tetanus vaccine + (centrifuge + capillary tubes + measuring ruler + hemocue and strips) / (automated complete hematology equipment + reagents) + (automated equipment for blood chemistry + reagents) / (glucometer with its strips) + sharps disposal

Complete:

Observe the following in the facility: scale + height rod + gynecological table / stretcher + CLAP obstetric tape / measuring tape + lamp + sphygmomanometer + stethoscope + prenatal maternal medical history forms + continuous three month supply of the following drugs: folic acid + iron / multivitamin + tetanus vaccine + (centrifuge + capillary tubes + measuring ruler + hemocue and strips + microscope) / (automated complete hematology equipment and reagents) + automated equipment for blood chemistry and reagents + prothrombin time equipment and thromboplastin and reagents + (equipment or rapid test for Syphilis (RPR) or VDRL) + (equipment or rapid test for HIV)

7030: Emergency care services

Denominator:

Total number of basic and complete facilities that provide emergency care services

Formula:

Basic:

Observe the following in the facility: sphygmomanometer / blood pressure apparatus + stethoscope + pinard stethoscope / portable doppler + autoclave / dry heat sterilizer + oxygen tank + adult reanimation bag + neonate reanimation bag + laryngoscope + manual vacuum aspiration (not required at CAPs) + continuous three month supply of the following drugs: oxytocin / methylergonovine + gentamicin / amikacin + dexamthasone / betamethasone + metronidazole / clindamycin + magnesium sulfate + calcium gluconate + hydralazine + ampicillin / penicillin

Complete:

Observe the following in the record: sphygmomanometer / blood pressure apparatus + stethoscope + pinard stethoscope / portable doppler + autoclave / dry heat sterilizer + oxygen tank + adult reanimation bag + neonate reanimation bag + laryngoscope + manual vacuum aspiration / currettage equipment + anesthesia equipment + C-section equipment + neonatal stethoscope / pediatric stethoscope + continuous three month supply of the following drugs: oxytocin / methylergonovine + gentamicin / amikacin + dexamthasone / betamethasone + metronidazole / clindamycin + magnesium sulfate + calcium gluconate + hydralazine hydrochloride + ampicillin / crystal benzylpenicillin / penicillin / cloranfenicol + ceftriazone + nifedipine + diazepam + diphenylhydantoin

7050: Family planning services

Denominator:

Total number of facilities that store family planning methods

Formula:

Observe the following in the facility: continuous three month supply of the following family planning methods: male condoms + oral contraceptive pill + injectable + intrauterine device (at basic and complete facilities only)

7160: Situation room reports and graphics

Denominator:

Total number of CAPs and CAIMIs

Formula:

Observe the following in the facility's situation room: at least one of the following infant care analyses: (Vaccination / Micronutrients) + at least one of the following maternal/neonatal care analyses: (Family planning methods / Prenatal coverage / Birth coverage / Postpartum coverage / Community visits / Hunger plan)

8610: Child growth and development

Denominator:

Total number of child growth records in the sample including at least one visit in the past year

Formula:

Observe the following in the record: At least one visit including the following checks: weight + height + growth and development counseling