

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

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Foreword

This Data Quality Report on the Salud Mesoamérica Initiative (SMI) Nicaragua 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 the 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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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 Nicaragua, baseline data were collected at households and health facilities in intervention and comparison areas (2013). The first follow-up data collection took place at health facilities in intervention areas only (2014), and this second follow-up measurement was performed at households and health facilities in intervention and comparison areas (2017).

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/marketplace 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 2017 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 60 intervention-area health facilities was selected from a list of all facilities serving the 19 municipalities covered by the SMI initiative, located in the departments of Jinotega, Matagalpa, RAAS, and RAAN. 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-Nicaragua 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 20 in intervention areas is reached. If the sample still has not reached 20, 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.

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 antenatal care were evaluated in all facilities. In addition, records of delivery, postpartum care, maternal complications and neonatal complications were evaluated at the basic and complete level of facility. Cases of women who stayed in maternity homes in the last 18 months homes, and attended their deliveries in the health facilities of the sample, were also identified in the health facilities, and reviewed for adoption of family planning methods.

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. Cases of obstetric and neonatal complications were sampled at random from Ministry of Health registries and, if required, additional cases were sampled using a systematic sampling technique in-facility.

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 Nicaragua from May 29, 2017 to June 8, 2017. Nine doctors were trained to conduct the health facility surveys. All UNIMER 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. Household surveyors participated in a two-day pilot data collection exercise in communities that were not selected to be part of the SMI sample, where they applied the census and household survey. 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 Nicaragua Ministry of Health provided oversight during pilot exercises. IHME and UNIMER 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. A retraining for seven additional household data collectors and a supervisory trip was conducted from June 19-22, during which the new data collectors underwent two days of classroom training, a day of internal practice, and received feedback from IHME and UNIMER. An IHME staff member also observed active census, household, and health facility data collection during this time and provided feedback to data collectors.

1.5.3 Data collection and management

As described in 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 Nicaragua, data collection was conducted between June 13, 2017 and December 20, 2017.

1.5.4 Data analysis and report writing

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

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

2.1 General description

2.1.1 Health facility classification

Table 2.1 shows the number of health facilities by EONC classification level in all evaluation periods.

Table 2.1: Health facility classification

EONC	Baseline	First Follow-Up	Second Follow-Up
Ambulatory	32	46	37
Basic	5	11	20
Complete	3	3	3
Total	40	60	60

2.1.2 Geographical representation

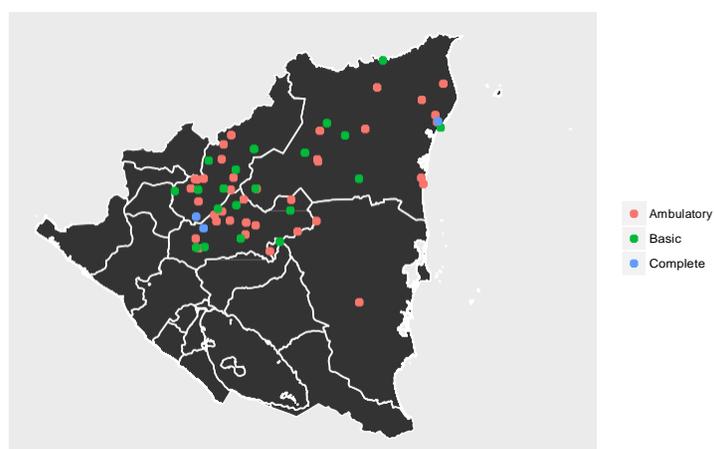
Facilities surveyed during the 36-month evaluation were located in 22 municipalities within four departments.

Table 2.2: Number of facilities by municipality and health department

Municipality	Baseline Facilities	First Follow-up Facilities	Second Follow-up Facilities
Bilwi			
Prinzapolka	-	-	3
Puerto Cabezas	-	13	7
Waspán	-	7	2
Jinotega			
Bocay	2	3	2
El Cua	4	5	4
Jinotega	-	-	1
San Sebastián de Yali	2	2	3
Santa María de Pantasma	1	1	3
Wiwilí	2	1	4
Las Minas			
Bocana de Paiwas	-	1	1
Bonanza	-	2	2
Mulukuku	-	1	2
Paiwas	-	-	2
Rosita	-	3	2
Siuna	-	4	3
Matagalpa			
Bocana de Paiwas	3	-	-
Matagalpa	5	1	1
Matiguás	3	3	5
Rancho Grande	-	1	3
San Dionisio	-	2	1
Terrabona	-	2	3
Tuma - La Dalia	4	5	5
Waslala	-	3	1
RAAN			
Bonanza	1	-	-
Puerto Cabezas	6	-	-
Rosita	2	-	-
Siuna	2	-	-
Waspán	3	-	-
Total	40	60	60

* At baseline, municipalities were categorized based on governmental department. At first and second follow-up, municipalities are categorized based on the Local Comprehensive Health Care System (SILAIS) regions. This resulted in the re-categorization of Bocana de Paiwas, Bonanza, Rosita, Puerto Cabezas, Siuna, and Waspán into different departments for the first and second follow-up. For the purposes of this table, facility classifications are displayed based on the classification of municipality and department defined at each round.

Figure 2.1: Geographical representation of facilities



2.1.3 Governing authority

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

Table 2.3: Medical record extraction

Record Type	Baseline			First Follow-Up			Second Follow-Up		
	Ambulatory	Basic	Complete	Ambulatory	Basic	Complete	Ambulatory	Basic	Complete
Antenatal care	325	55	24	415	105	49	396	96	0
Postpartum care	0	53	24	0	140	51	0	219	66
Delivery	0	66	24	0	172	49	0	240	76
Maternal complications	0	169	157	0	172	70	0	237	79
Neonatal complications	0	169	142	0	168	69	0	234	61
Casas maternas	16	18	13	35	179	24	0	0	0
Total	341	530	384	450	936	312	396	1026	282

2.1.4 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 was also evaluated.

Table 2.4: Referrals, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Receives referred patients from other facilities	32	34.4	(18.6 - 53.2)	45	46.7	(31.7 - 62.1)	37	27.0	(13.8 - 44.1)
Sends patient referrals to other facilities	32	100.0	(89.1 - 100)	45	97.8	(88.2 - 99.9)	37	97.3	(85.8 - 99.9)

* Referral data missing from one facility at first follow-up.

Table 2.5: Referrals, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Receives referred patients from other facilities	5	100	(47.8 - 100)	11	90.9	(58.7 - 99.8)	20	100	(83.2 - 100)
Receives referred routine deliveries	-	-	-	-	-	-	20	95	(75.1 - 99.9)
Receives referred complicated deliveries	-	-	-	-	-	-	20	85	(62.1 - 96.8)
Sends patient referrals to other facilities	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	20	100	(83.2 - 100)
Sends referred routine deliveries	-	-	-	-	-	-	20	25	(8.7 - 49.1)
Sends referred complicated deliveries	-	-	-	-	-	-	20	80	(56.3 - 94.3)

Table 2.6: Referrals, complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Receives referred patients from other facilities	3	100	(29.2 - 100)	3	100	(29.2 - 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	3	100	(29.2 - 100)	3	100	(29.2 - 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)

Representatives at facilities which receive referred patients for routine and complicated deliveries were also asked about documents requested during referral processing. In the majority of cases, “other” referred to the Perinatal History Card.

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

	Basic			Complete		
	N	%	CI	N	%	CI
Routine Deliveries						
Referral sheet	19	100.0	(82.4 - 100)	3	100.0	(29.2 - 100)
Patient medical record	19	42.1	(20.3 - 66.5)	3	33.3	(0.8 - 90.6)
Lab tests	19	10.5	(1.3 - 33.1)	3	0.0	(0 - 70.8)
Proof of insurance	19	0.0	(0 - 17.6)	3	0.0	(0 - 70.8)
Other documentation	19	52.6	(28.9 - 75.6)	3	66.7	(9.4 - 99.2)
Complicated Deliveries						
Referral sheet	17	100.0	(80.5 - 100)	3	100.0	(29.2 - 100)
Patient medical record	17	41.2	(18.4 - 67.1)	3	66.7	(9.4 - 99.2)
Lab tests	17	23.5	(6.8 - 49.9)	3	0.0	(0 - 70.8)
Proof of insurance	17	0.0	(0 - 19.5)	3	0.0	(0 - 70.8)
Other documentation	17	58.8	(32.9 - 81.6)	3	66.7	(9.4 - 99.2)

2.2 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 facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
General physician	32	50.0	(31.9 - 68.1)	45	37.8	(23.8 - 53.5)	37	37.8	(22.5 - 55.2)
Pediatrician	32	3.1	(0.1 - 16.2)	45	4.4	(0.5 - 15.1)	37	0.0	(0 - 9.5)
Nutritionist	32	3.1	(0.1 - 16.2)	45	2.2	(0.1 - 11.8)	37	0.0	(0 - 9.5)
Pharmacist	32	3.1	(0.1 - 16.2)	45	15.6	(6.5 - 29.5)	37	0.0	(0 - 9.5)
Nurse	32	65.6	(46.8 - 81.4)	45	73.3	(58.1 - 85.4)	37	48.6	(31.9 - 65.6)
Auxiliary nurse	32	59.4	(40.6 - 76.3)	45	48.9	(33.7 - 64.2)	37	64.9	(47.5 - 79.8)
Social worker	32	3.1	(0.1 - 16.2)	45	6.7	(1.4 - 18.3)	37	0.0	(0 - 9.5)
Lab technician	32	9.4	(2 - 25)	45	13.3	(5.1 - 26.8)	37	0.0	(0 - 9.5)
Ambulance driver	31	16.1	(5.5 - 33.7)	45	24.4	(12.9 - 39.5)	37	8.1	(1.7 - 21.9)
Doctor in social service	-	-	-	45	53.3	(37.9 - 68.3)	37	35.1	(20.2 - 52.5)
Nurse in social service	-	-	-	45	20.0	(9.6 - 34.6)	37	29.7	(15.9 - 47)
Community health worker	-	-	-	-	-	-	37	75.7	(58.8 - 88.2)

* Personnel data missing from one facility at first follow-up.

† Ambulance driver data missing for one facility at baseline.

Table 2.9: Personnel employed, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
General physician	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	20	95	(75.1 - 99.9)
Pediatrician	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	20	60	(36.1 - 80.9)
Nutritionist	5	20	(0.5 - 71.6)	11	9.1	(0.2 - 41.3)	20	10	(1.2 - 31.7)
Pharmacist	5	20	(0.5 - 71.6)	11	18.2	(2.3 - 51.8)	20	50	(27.2 - 72.8)
Nurse	5	100	(47.8 - 100)	11	90.9	(58.7 - 99.8)	20	95	(75.1 - 99.9)
Auxiliary nurse	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	20	95	(75.1 - 99.9)
Social worker	5	0	(0 - 52.2)	11	0.0	(0 - 28.5)	20	15	(3.2 - 37.9)
Lab technician	5	100	(47.8 - 100)	11	90.9	(58.7 - 99.8)	20	95	(75.1 - 99.9)
Internist	5	100	(47.8 - 100)	11	63.6	(30.8 - 89.1)	20	40	(19.1 - 63.9)
Gynecologist	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	20	65	(40.8 - 84.6)
Surgeon	5	100	(47.8 - 100)	11	90.9	(58.7 - 99.8)	20	60	(36.1 - 80.9)
Anesthesiologist	5	40	(5.3 - 85.3)	11	72.7	(39 - 94)	20	45	(23.1 - 68.5)
Emergency medical technician	5	20	(0.5 - 71.6)	11	27.3	(6 - 61)	20	20	(5.7 - 43.7)
Radiology technician	5	80	(28.4 - 99.5)	11	54.5	(23.4 - 83.3)	20	40	(19.1 - 63.9)
Ambulance driver	4	100	(39.8 - 100)	11	100.0	(71.5 - 100)	20	100	(83.2 - 100)
Doctor in social service	-	-	-	11	100.0	(71.5 - 100)	20	100	(83.2 - 100)
Nurse in social service	-	-	-	11	72.7	(39 - 94)	20	80	(56.3 - 94.3)
Community health worker	-	-	-	-	-	-	20	70	(45.7 - 88.1)
Maintenance worker	5	40	(5.3 - 85.3)	11	81.8	(48.2 - 97.7)	20	45	(23.1 - 68.5)

* Ambulance driver data missing for one facility at baseline.

Table 2.10: Personnel employed, complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
General physician	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Pediatrician	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Nutritionist	3	66.7	(9.4 - 99.2)	3	66.7	(9.4 - 99.2)	3	66.7	(9.4 - 99.2)
Pharmacist	3	66.7	(9.4 - 99.2)	3	66.7	(9.4 - 99.2)	3	100.0	(29.2 - 100)
Nurse	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Auxiliary nurse	3	66.7	(9.4 - 99.2)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Social worker	3	66.7	(9.4 - 99.2)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Lab technician	3	33.3	(0.8 - 90.6)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Internist	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Gynecologist	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Surgeon	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Anesthesiologist	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Emergency medical technician	2	0.0	(0 - 84.2)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Radiology technician	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Ambulance driver	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Doctor in social service	-	-	-	3	66.7	(9.4 - 99.2)	3	100.0	(29.2 - 100)
Nurse in social service	-	-	-	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Community health worker	-	-	-	-	-	-	3	33.3	(0.8 - 90.6)
Maintenance worker	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)

* Emergency medical technician data missing for one facility at baseline.

2.3 Basic infrastructure

2.3.1 Electricity and water

In the health facility questionnaire, facility managers were asked about sources of electricity and water to the facility. In the majority of cases when “other” was selected for source of water, the representatives indicated that water was procured from natural sources (such as rivers and springs), and/or transported from other water storage facilities. Facilities in the table below may report more than one source of electricity and water.

Table 2.11: Access to electricity and water, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Functional electricity supply	32	87.5	(71 - 96.5)	45	86.7	(73.2 - 94.9)	37	78.4	(61.8 - 90.2)
Public electricity network	28	92.9	(76.5 - 99.1)	39	89.7	(75.8 - 97.1)	29	89.7	(72.6 - 97.8)
Private electricity network	28	0.0	(0 - 12.3)	39	0.0	(0 - 9)	29	0.0	(0 - 11.9)
Emergency electric plant	28	3.6	(0.1 - 18.3)	39	0.0	(0 - 9)	29	0.0	(0 - 11.9)
Solar generator	28	10.7	(2.3 - 28.2)	39	20.5	(9.3 - 36.5)	29	13.8	(3.9 - 31.7)
Other source	28	3.6	(0.1 - 18.3)	39	5.1	(0.6 - 17.3)	29	3.4	(0.1 - 17.8)
Functional water supply	32	71.9	(53.3 - 86.3)	45	93.3	(81.7 - 98.6)	37	70.3	(53 - 84.1)
Public water network	32	46.9	(29.1 - 65.3)	45	53.3	(37.9 - 68.3)	37	40.5	(24.8 - 57.9)
Public well	32	21.9	(9.3 - 40)	45	33.3	(20 - 49)	37	13.5	(4.5 - 28.8)
Protected well at facility	32	15.6	(5.3 - 32.8)	45	17.8	(8 - 32.1)	37	13.5	(4.5 - 28.8)
Unprotected well	32	3.1	(0.1 - 16.2)	45	2.2	(0.1 - 11.8)	37	5.4	(0.7 - 18.2)
Manual pump	32	3.1	(0.1 - 16.2)	45	2.2	(0.1 - 11.8)	37	0.0	(0 - 9.5)
Bottled water	32	0.0	(0 - 10.9)	45	0.0	(0 - 7.9)	37	5.4	(0.7 - 18.2)
Tank or pipe truck	32	0.0	(0 - 10.9)	45	0.0	(0 - 7.9)	37	2.7	(0.1 - 14.2)
Rain water	32	3.1	(0.1 - 16.2)	45	2.2	(0.1 - 11.8)	37	10.8	(3 - 25.4)
Other source	32	9.4	(2 - 25)	45	6.7	(1.4 - 18.3)	37	18.9	(8 - 35.2)

* Electricity and water data missing from one facility at first follow-up.

Table 2.12: Access to electricity and water, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Functional electricity supply	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	20	100	(83.2 - 100)
Public electricity network	5	100	(47.8 - 100)	11	90.9	(58.7 - 99.8)	20	100	(83.2 - 100)
Private electricity network	5	0	(0 - 52.2)	11	0.0	(0 - 28.5)	20	0	(0 - 16.8)
Emergency electric plant	5	20	(0.5 - 71.6)	11	45.5	(16.7 - 76.6)	20	20	(5.7 - 43.7)
Solar generator	5	0	(0 - 52.2)	11	0.0	(0 - 28.5)	20	5	(0.1 - 24.9)
Other source	5	0	(0 - 52.2)	11	9.1	(0.2 - 41.3)	20	0	(0 - 16.8)
Functional water supply	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	20	100	(83.2 - 100)
Public water network	5	60	(14.7 - 94.7)	11	54.5	(23.4 - 83.3)	20	65	(40.8 - 84.6)
Public well	5	0	(0 - 52.2)	11	9.1	(0.2 - 41.3)	20	10	(1.2 - 31.7)
Protected well at facility	5	60	(14.7 - 94.7)	11	18.2	(2.3 - 51.8)	20	35	(15.4 - 59.2)
Unprotected well	5	0	(0 - 52.2)	11	9.1	(0.2 - 41.3)	20	0	(0 - 16.8)
Manual pump	5	0	(0 - 52.2)	11	0.0	(0 - 28.5)	20	0	(0 - 16.8)
Bottled water	5	0	(0 - 52.2)	11	0.0	(0 - 28.5)	20	0	(0 - 16.8)
Tank or pipe truck	5	0	(0 - 52.2)	11	0.0	(0 - 28.5)	20	5	(0.1 - 24.9)
Rain water	5	0	(0 - 52.2)	11	0.0	(0 - 28.5)	20	5	(0.1 - 24.9)
Other source	5	20	(0.5 - 71.6)	11	36.4	(10.9 - 69.2)	20	5	(0.1 - 24.9)

Table 2.13: Access to electricity and water, complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Functional electricity supply	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Public electricity network	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Private electricity network	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)
Emergency electric plant	3	33.3	(0.8 - 90.6)	3	0.0	(0 - 70.8)	3	100.0	(29.2 - 100)
Solar generator	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)
Other source	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)
Functional water supply	3	100.0	(29.2 - 100)	3	66.7	(9.4 - 99.2)	3	100.0	(29.2 - 100)
Public water network	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Public well	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)
Protected well at facility	3	33.3	(0.8 - 90.6)	3	33.3	(0.8 - 90.6)	3	33.3	(0.8 - 90.6)
Unprotected well	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)
Manual pump	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)
Bottled water	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)
Tank or pipe truck	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)	3	33.3	(0.8 - 90.6)
Rain water	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)
Other source	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)	3	66.7	(9.4 - 99.2)

2.4 Internet access

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

Table 2.14: Internet access, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Functional internet connection	32	3.1	(0.1 - 16.2)	45	11.1	(3.7 - 24.1)	37	10.8	(3 - 25.4)

* Internet data missing from one facility at first follow-up.

Table 2.15: Internet access, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Functional internet connection	5	40	(5.3 - 85.3)	11	90.9	(58.7 - 99.8)	20	80	(56.3 - 94.3)

Table 2.16: Internet access, complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Functional internet connection	3	100	(29.2 - 100)	3	100	(29.2 - 100)	3	66.7	(9.4 - 99.2)

2.5 Social agreements performance indicator

Forty communities in SMI intervention areas received seed funds as part of the Social Agreements for Health and Wellness. During the questionnaire and observation, surveyors evaluated whether facilities that serve those communities had proper documentation of the use of seed funds, as detailed by the social agreements performance indicator. Each community's agreement must be found at a health facility and satisfy the following requirements:

- Seed fund observed by the interviewer
- Seed fund signed by the ESAFC representative
- Seed fund signed by a representative of the community
- Seed fund signed by the municipal director
- Innovation funds agreement observed by interviewer
- Project support document for the innovation fund observed by interviewer

Table 2.17: Social agreements among participating communities in SMI intervention areas

	Second Follow-Up		
	N	%	CI
All following components found in social agreements documentation:	40	77.5	(61.5 - 89.2)
Seed fund agreement observed at a health facility	40	92.5	(79.6 - 98.4)
Seed fund agreement signed by ESAFC	37	89.2	(74.6 - 97)
Seed fund agreement signed by community representative	37	97.3	(85.8 - 99.9)
Seed fund agreement signed by municipal director	37	91.9	(78.1 - 98.3)
Innovation funds agreement observed at a health facility	40	85.0	(70.2 - 94.3)
Innovation fund project support documentation observed	40	80.0	(64.4 - 90.9)

3 Chapter 3: Child 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. Slight discrepancies may exist between responses in the questionnaire and observation.

Table 3.1: Child health care services provision, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Provides childcare services	32	100.0	(89.1 - 100)	45	100.0	(92.1 - 100)	37	100.0	(90.5 - 100)
Vaccinates children under five	32	93.8	(79.2 - 99.2)	45	86.7	(73.2 - 94.9)	37	100.0	(90.5 - 100)
Child health care area									
Visual and auditory privacy	32	81.2	(63.6 - 92.8)	42	61.9	(45.6 - 76.4)	37	59.5	(42.1 - 75.2)
Non private area	32	15.6	(5.3 - 32.8)	42	28.6	(15.7 - 44.6)	37	35.1	(20.2 - 52.5)
Visual privacy only	32	0.0	(0 - 10.9)	42	9.5	(2.7 - 22.6)	37	5.4	(0.7 - 18.2)
Other	32	3.1	(0.1 - 16.2)	42	0.0	(0 - 8.4)	37	0.0	(0 - 9.5)
Do not provide service	32	0.0	(0 - 10.9)	42	0.0	(0 - 8.4)	37	0.0	(0 - 9.5)

* Childcare provision data missing from one facility at first follow-up.

† Observed childcare area data missing from four facilities at first follow-up.

Table 3.2: Child health care services provision, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Provides childcare services	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	20	100	(83.2 - 100)
Vaccinates children under five	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	20	95	(75.1 - 99.9)
Child health care area									
Visual and auditory privacy	5	100	(47.8 - 100)	11	81.8	(48.2 - 97.7)	20	80	(56.3 - 94.3)
Non private area	5	0	(0 - 52.2)	11	9.1	(0.2 - 41.3)	20	10	(1.2 - 31.7)
Visual privacy only	5	0	(0 - 52.2)	11	9.1	(0.2 - 41.3)	20	0	(0 - 16.8)
Other	5	0	(0 - 52.2)	11	0.0	(0 - 28.5)	20	5	(0.1 - 24.9)
Do not provide service	5	0	(0 - 52.2)	11	0.0	(0 - 28.5)	20	5	(0.1 - 24.9)

Table 3.3: Child health care services provision, complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Provides childcare services	3	100	(29.2 - 100)	3	66.7	(9.4 - 99.2)	3	100.0	(29.2 - 100)
Vaccinates children under five	3	100	(29.2 - 100)	3	100.0	(29.2 - 100)	3	66.7	(9.4 - 99.2)
Child health care area									
Visual and auditory privacy	2	100	(15.8 - 100)	3	100.0	(29.2 - 100)	3	66.7	(9.4 - 99.2)
Non private area	2	0	(0 - 84.2)	3	0.0	(0 - 70.8)	3	33.3	(0.8 - 90.6)
Visual privacy only	2	0	(0 - 84.2)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)
Other	2	0	(0 - 84.2)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)
Do not provide service	2	0	(0 - 84.2)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)

* Observed childcare area data missing from one facilities at baseline.

3.2 Child health care equipment

During the observation component of the survey, interviewers observed the presence and functionality (if possible) of equipment related to child health care in ambulatory and basic facilities. The standards for child health care are determined by the SMI composite child health care indicator (7010). Facilities which do not provide child care or for which interviewers did not enter the child care area during observation are excluded. Unless otherwise specified, at least one functional item must be observed for each of the child care equipment requirements. Drug requirements for child health are detailed in section 3.3.

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Pediatric scales	32	81.2	(63.6 - 92.8)	42	100.0	(91.6 - 100)	37	83.8	(68 - 93.8)
Height rod	32	93.8	(79.2 - 99.2)	42	100.0	(91.6 - 100)	37	97.3	(85.8 - 99.9)
Stethoscope	32	90.6	(75 - 98)	42	97.6	(87.4 - 99.9)	37	100.0	(90.5 - 100)
Thermometer	32	71.9	(53.3 - 86.3)	42	95.2	(83.8 - 99.4)	37	100.0	(90.5 - 100)
Growth / Development card	32	96.9	(83.8 - 99.9)	42	92.9	(80.5 - 98.5)	37	94.6	(81.8 - 99.3)
All equipment observed and functional	32	53.1	(34.7 - 70.9)	42	90.5	(77.4 - 97.3)	37	81.1	(64.8 - 92)

* Equipment data missing from four facilities at first follow-up.

† Digital thermometer only captured as alternative to oral/axillary thermometers at second follow-up evaluation.

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Pediatric scales	5	80	(28.4 - 99.5)	11	100.0	(71.5 - 100)	19	100.0	(82.4 - 100)
Height rod	5	80	(28.4 - 99.5)	11	100.0	(71.5 - 100)	19	100.0	(82.4 - 100)
Stethoscope	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	19	100.0	(82.4 - 100)
Pediatric stethoscope	5	0	(0 - 52.2)	11	90.9	(58.7 - 99.8)	19	84.2	(60.4 - 96.6)
Thermometer	5	40	(5.3 - 85.3)	11	100.0	(71.5 - 100)	19	100.0	(82.4 - 100)
Growth / Development card	5	20	(0.5 - 71.6)	11	90.9	(58.7 - 99.8)	19	84.2	(60.4 - 96.6)
All equipment observed and functional	5	0	(0 - 52.2)	11	81.8	(48.2 - 97.7)	19	73.7	(48.8 - 90.9)

* Digital thermometer only captured as alternative to oral/axillary thermometers at second follow-up evaluation.

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. Since the baseline survey did not capture whether or not stock information came from a kardex, it is assumed that all three-month stock data collected came from documentation, as was instructed.

Table 3.6: Child health care pharmacy inputs, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Oral rehydration salts	32	90.6	(75 - 98)	42	100.0	(91.6 - 100)	37	91.9	(78.1 - 98.3)
Ferrous sulfate / zinc sulfate / zinc gluconate	32	96.9	(83.8 - 99.9)	42	100.0	(91.6 - 100)	37	100.0	(90.5 - 100)
Albendazole / mebendazole	32	93.8	(79.2 - 99.2)	42	92.9	(80.5 - 98.5)	37	100.0	(90.5 - 100)
All drugs observed on day of observation	32	81.2	(63.6 - 92.8)	42	92.9	(80.5 - 98.5)	37	91.9	(78.1 - 98.3)
All drugs continuously available in past three months	32	81.2	(63.6 - 92.8)	42	90.5	(77.4 - 97.3)	37	83.8	(68 - 93.8)

* Ferrous sulfate three-month stock not captured at baseline.

† Pharmacy data missing from four facilities at first follow-up.

Table 3.7: Child health care pharmacy inputs, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Oral rehydration salts	5	80	(28.4 - 99.5)	11	100.0	(71.5 - 100)	19	100.0	(82.4 - 100)
Ferrous sulfate / zinc sulfate / zinc gluconate	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	19	100.0	(82.4 - 100)
Albendazole / mebendazole	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	19	100.0	(82.4 - 100)
Erythromycin / amoxicillin / penicillin benzathine	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	19	100.0	(82.4 - 100)
All drugs observed on day of observation	5	80	(28.4 - 99.5)	11	100.0	(71.5 - 100)	19	100.0	(82.4 - 100)
All drugs continuously available in past three months	5	40	(5.3 - 85.3)	11	81.8	(48.2 - 97.7)	19	84.2	(60.4 - 96.6)

* Ferrous sulfate three-month stock not captured at baseline.

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. Since the baseline survey did not capture whether or not stock information came from a kardex, it is assumed that all three-month stock data collected came from documentation, as was instructed.

Table 3.8: Child health care vaccines, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Pentavalent / (DPT + Hep B + HiB)	15	100.0	(78.2 - 100)	20	100	(83.2 - 100)	23	100.0	(85.2 - 100)
Polio	15	100.0	(78.2 - 100)	20	100	(83.2 - 100)	23	95.7	(78.1 - 99.9)
Measles, Mumps, Rubella	15	100.0	(78.2 - 100)	20	100	(83.2 - 100)	23	95.7	(78.1 - 99.9)
Rotavirus	15	93.3	(68.1 - 99.8)	20	100	(83.2 - 100)	23	95.7	(78.1 - 99.9)
Pneumococcal conjugate	15	73.3	(44.9 - 92.2)	20	100	(83.2 - 100)	23	100.0	(85.2 - 100)
BCG	15	33.3	(11.8 - 61.6)	20	100	(83.2 - 100)	23	100.0	(85.2 - 100)
All vaccines observed on day of survey	23	13.0	(2.8 - 33.6)	23	100	(85.2 - 100)	23	95.7	(78.1 - 99.9)
All vaccines continuously available in past three months	23	13.0	(2.8 - 33.6)	23	87	(66.4 - 97.2)	23	78.3	(56.3 - 92.5)

* Vaccine three-month stock only captured for MMR and BCG at baseline and first follow-up.

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

Table 3.9: Child health care vaccines, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Pentavalent / (DPT + Hep B + HiB)	5	100	(47.8 - 100)	10	100	(69.2 - 100)	18	100.0	(81.5 - 100)
Polio	5	100	(47.8 - 100)	10	100	(69.2 - 100)	18	100.0	(81.5 - 100)
Measles, Mumps, Rubella	5	100	(47.8 - 100)	10	100	(69.2 - 100)	18	100.0	(81.5 - 100)
Rotavirus	5	80	(28.4 - 99.5)	10	100	(69.2 - 100)	18	100.0	(81.5 - 100)
Pneumococcal conjugate	5	40	(5.3 - 85.3)	10	90	(55.5 - 99.7)	18	94.4	(72.7 - 99.9)
BCG	5	20	(0.5 - 71.6)	10	100	(69.2 - 100)	18	100.0	(81.5 - 100)
All vaccines observed on day of survey	5	20	(0.5 - 71.6)	10	90	(55.5 - 99.7)	18	94.4	(72.7 - 99.9)
All vaccines continuously available in past three months	5	20	(0.5 - 71.6)	10	80	(44.4 - 97.5)	18	88.9	(65.3 - 98.6)

* Vaccine three-month stock only captured for MMR and BCG at baseline and first follow-up.

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

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. It is important to note that the classification of the facility type **centro de salud** has changed across evaluations. At baseline, these facilities were classified as either ambulatory (if without doctor) or basic (if with doctor). At first follow-up all centros were classified ambulatory. At the second follow-up, all centros were classified basic. For the purposes of these comparisons, they are categorized according to the original classification during that round of data collection.

Table 3.10: Child health care composite indicator, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
All equipment observed and functional	32	53.1	(34.7 - 70.9)	42	90.5	(77.4 - 97.3)	37	81.1	(64.8 - 92)
All pharmacy inputs continuously available in past three months	32	81.2	(63.6 - 92.8)	42	90.5	(77.4 - 97.3)	37	83.8	(68 - 93.8)
All vaccines continuously available in past three months	23	13.0	(2.8 - 33.6)	23	87.0	(66.4 - 97.2)	23	78.3	(56.3 - 92.5)
Child health care provision according to standard	32	12.5	(3.5 - 29)	42	76.2	(60.5 - 87.9)	37	59.5	(42.1 - 75.2)

* Ferrous sulfate three-month stock not captured at baseline.

† Vaccine three-month stock only captured for MMR and BCG at baseline and first follow-up.

‡ Digital thermometer only captured as alternative to oral/axillary thermometers at second follow-up evaluation.

§ Kardex data and three month-stock data not captured for all drugs at baseline evaluation.

Table 3.11: Child health care composite indicator, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
All equipment observed and functional	5	0	(0 - 52.2)	11	81.8	(48.2 - 97.7)	19	73.7	(48.8 - 90.9)
All pharmacy inputs continuously available in past three months	5	40	(5.3 - 85.3)	11	81.8	(48.2 - 97.7)	19	84.2	(60.4 - 96.6)
All vaccines continuously available in past three months	5	20	(0.5 - 71.6)	10	80.0	(44.4 - 97.5)	18	88.9	(65.3 - 98.6)
Child health care provision according to standard	5	0	(0 - 52.2)	11	63.6	(30.8 - 89.1)	19	52.6	(28.9 - 75.6)

* Ferrous sulfate three-month stock not captured at baseline.

† Vaccine three-month stock only captured for MMR and BCG at baseline and first follow-up.

‡ Digital thermometer only captured as alternative to oral/axillary thermometers at second follow-up evaluation.

§ Kardex data and three month-stock data not captured for all drugs at baseline evaluation.

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 facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Vaccinates children under five	32	93.8	(79.2 - 99.2)	45	86.7	(73.2 - 94.9)	37	100.0	(90.5 - 100)
Immunization area									
Visual and auditory privacy	31	51.6	(33.1 - 69.8)	38	55.3	(38.3 - 71.4)	37	64.9	(47.5 - 79.8)
Non private area	31	38.7	(21.8 - 57.8)	38	26.3	(13.4 - 43.1)	37	24.3	(11.8 - 41.2)
Visual privacy only	31	3.2	(0.1 - 16.7)	38	10.5	(2.9 - 24.8)	37	5.4	(0.7 - 18.2)
Other	31	6.5	(0.8 - 21.4)	38	0.0	(0 - 9.3)	37	0.0	(0 - 9.5)
Do not provide service	31	0.0	(0 - 11.2)	38	7.9	(1.7 - 21.4)	37	5.4	(0.7 - 18.2)

* Under-five vaccine provision data missing from one facility at first follow-up.

† Immunization area data missing from one facility at baseline and eight facilities at first follow-up.

Table 4.2: Immunization services provision, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Vaccinates children under five	5	100	(47.8 - 100)	11	100	(71.5 - 100)	20	95	(75.1 - 99.9)
Immunization area									
Visual and auditory privacy	5	80	(28.4 - 99.5)	10	30	(6.7 - 65.2)	20	50	(27.2 - 72.8)
Non private area	5	20	(0.5 - 71.6)	10	60	(26.2 - 87.8)	20	40	(19.1 - 63.9)
Visual privacy only	5	0	(0 - 52.2)	10	10	(0.3 - 44.5)	20	0	(0 - 16.8)
Other	5	0	(0 - 52.2)	10	0	(0 - 30.8)	20	0	(0 - 16.8)
Do not provide service	5	0	(0 - 52.2)	10	0	(0 - 30.8)	20	10	(1.2 - 31.7)

* Immunization area data missing from one facility at first follow-up.

Table 4.3: Immunization services provision, complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Vaccinates children under five	3	100	(29.2 - 100)	3	100	(29.2 - 100)	3	66.7	(9.4 - 99.2)
Immunization area									
Visual and auditory privacy	2	100	(15.8 - 100)	3	100	(29.2 - 100)	3	66.7	(9.4 - 99.2)
Non private area	2	0	(0 - 84.2)	3	0	(0 - 70.8)	3	33.3	(0.8 - 90.6)
Visual privacy only	2	0	(0 - 84.2)	3	0	(0 - 70.8)	3	0.0	(0 - 70.8)
Other	2	0	(0 - 84.2)	3	0	(0 - 70.8)	3	0.0	(0 - 70.8)
Do not provide service	2	0	(0 - 84.2)	3	0	(0 - 70.8)	3	0.0	(0 - 70.8)

* Immunization area data missing from one facility at baseline.

4.2 Vaccine storage

In the questionnaire component of the survey, representatives of facilities which provide immunization services to children under five were asked about vaccine storage logistics.

Table 4.4: Vaccine storage, ambulatory facilities which provide immunization services to children under five

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Stores vaccines	30	80	(61.4 - 92.3)	39	64.1	(47.2 - 78.8)	37	64.9	(47.5 - 79.8)
Collected from another health facility	30	10	(2.1 - 26.5)	39	17.9	(7.5 - 33.5)	37	18.9	(8 - 35.2)
Delivered when immunization services provided	30	10	(2.1 - 26.5)	39	17.9	(7.5 - 33.5)	37	16.2	(6.2 - 32)
Does not store vaccines	30	0	(0 - 11.6)	39	0.0	(0 - 9)	37	0.0	(0 - 9.5)

Table 4.5: Vaccine storage, basic facilities which provide immunization services to children under five

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Stores vaccines	5	100	(47.8 - 100)	11	100	(71.5 - 100)	19	100	(82.4 - 100)
Collected from another health facility	5	0	(0 - 52.2)	11	0	(0 - 28.5)	19	0	(0 - 17.6)
Delivered when immunization services provided	5	0	(0 - 52.2)	11	0	(0 - 28.5)	19	0	(0 - 17.6)
Does not store vaccines	5	0	(0 - 52.2)	11	0	(0 - 28.5)	19	0	(0 - 17.6)

Table 4.6: Vaccine storage, complete facilities which provide immunization services to children under five

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Stores vaccines	3	100	(29.2 - 100)	3	100	(29.2 - 100)	2	100	(15.8 - 100)
Collected from another health facility	3	0	(0 - 70.8)	3	0	(0 - 70.8)	2	0	(0 - 84.2)
Delivered when immunization services provided	3	0	(0 - 70.8)	3	0	(0 - 70.8)	2	0	(0 - 84.2)
Does not store vaccines	3	0	(0 - 70.8)	3	0	(0 - 70.8)	2	0	(0 - 84.2)

4.3 Vaccine 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 facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Ordering strategy									
Determines own need	24	83.3	(62.6 - 95.3)	25	100	(86.3 - 100)	24	100.0	(85.8 - 100)
Need determined elsewhere	24	8.3	(1 - 27)	25	0	(0 - 13.7)	24	0.0	(0 - 14.2)
Both (differ by vaccine)	24	4.2	(0.1 - 21.1)	25	0	(0 - 13.7)	24	0.0	(0 - 14.2)
Don't know	24	4.2	(0.1 - 21.1)	25	0	(0 - 13.7)	24	0.0	(0 - 14.2)
Time to receive supplies									
One day	23	73.9	(51.6 - 89.8)	25	88	(68.8 - 97.5)	24	83.3	(62.6 - 95.3)
2 - 7 days	23	21.7	(7.5 - 43.7)	25	12	(2.5 - 31.2)	24	12.5	(2.7 - 32.4)
More than one week	23	4.3	(0.1 - 21.9)	25	0	(0 - 13.7)	24	0.0	(0 - 14.2)
Reception of quantity ordered									
Always	24	70.8	(48.9 - 87.4)	25	92	(74 - 99)	24	87.5	(67.6 - 97.3)
Almost always	24	29.2	(12.6 - 51.1)	25	4	(0.1 - 20.4)	24	12.5	(2.7 - 32.4)
Almost never	24	0.0	(0 - 14.2)	25	0	(0 - 13.7)	24	0.0	(0 - 14.2)
Don't Know	24	0.0	(0 - 14.2)	25	4	(0.1 - 20.4)	24	0.0	(0 - 14.2)

Table 4.8: Vaccine supply, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Ordering strategy									
Determines own need	5	40	(5.3 - 85.3)	11	100.0	(71.5 - 100)	19	100.0	(82.4 - 100)
Need determined elsewhere	5	60	(14.7 - 94.7)	11	0.0	(0 - 28.5)	19	0.0	(0 - 17.6)
Both (differ by vaccine)	5	0	(0 - 52.2)	11	0.0	(0 - 28.5)	19	0.0	(0 - 17.6)
Don't know	5	0	(0 - 52.2)	11	0.0	(0 - 28.5)	19	0.0	(0 - 17.6)
Time to receive supplies									
One day	5	60	(14.7 - 94.7)	11	100.0	(71.5 - 100)	19	89.5	(66.9 - 98.7)
2 - 7 days	5	40	(5.3 - 85.3)	11	0.0	(0 - 28.5)	19	10.5	(1.3 - 33.1)
More than one week	5	0	(0 - 52.2)	11	0.0	(0 - 28.5)	19	0.0	(0 - 17.6)
Reception of quantity ordered									
Always	5	60	(14.7 - 94.7)	11	90.9	(58.7 - 99.8)	19	94.7	(74 - 99.9)
Almost always	5	40	(5.3 - 85.3)	11	9.1	(0.2 - 41.3)	19	5.3	(0.1 - 26)
Almost never	5	0	(0 - 52.2)	11	0.0	(0 - 28.5)	19	0.0	(0 - 17.6)
Don't Know	5	0	(0 - 52.2)	11	0.0	(0 - 28.5)	19	0.0	(0 - 17.6)

Table 4.9: Vaccine supply, complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Ordering strategy									
Determines own need	3	100	(29.2 - 100)	3	100	(29.2 - 100)	2	100	(15.8 - 100)
Need determined elsewhere	3	0	(0 - 70.8)	3	0	(0 - 70.8)	2	0	(0 - 84.2)
Both (differ by vaccine)	3	0	(0 - 70.8)	3	0	(0 - 70.8)	2	0	(0 - 84.2)
Don't know	3	0	(0 - 70.8)	3	0	(0 - 70.8)	2	0	(0 - 84.2)
Time to receive supplies									
One day	3	100	(29.2 - 100)	3	100	(29.2 - 100)	2	100	(15.8 - 100)
2 - 7 days	3	0	(0 - 70.8)	3	0	(0 - 70.8)	2	0	(0 - 84.2)
More than one week	3	0	(0 - 70.8)	3	0	(0 - 70.8)	2	0	(0 - 84.2)
Reception of quantity ordered									
Always	3	100	(29.2 - 100)	3	100	(29.2 - 100)	2	100	(15.8 - 100)
Almost always	3	0	(0 - 70.8)	3	0	(0 - 70.8)	2	0	(0 - 84.2)
Almost never	3	0	(0 - 70.8)	3	0	(0 - 70.8)	2	0	(0 - 84.2)
Don't Know	3	0	(0 - 70.8)	3	0	(0 - 70.8)	2	0	(0 - 84.2)

4.4 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.

Table 4.10: Vaccines observed day of survey, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Pentavalent	19	89.5	(66.9 - 98.7)	25	100	(86.3 - 100)	24	100.0	(85.8 - 100)
Polio / IPV	19	89.5	(66.9 - 98.7)	25	100	(86.3 - 100)	24	95.8	(78.9 - 99.9)
Measles, mumps, rubella	19	89.5	(66.9 - 98.7)	25	100	(86.3 - 100)	24	95.8	(78.9 - 99.9)
Rotavirus	19	84.2	(60.4 - 96.6)	25	100	(86.3 - 100)	24	95.8	(78.9 - 99.9)
Pneumococcal conjugate	19	63.2	(38.4 - 83.7)	25	100	(86.3 - 100)	24	100.0	(85.8 - 100)
BCG	19	26.3	(9.1 - 51.2)	25	100	(86.3 - 100)	24	100.0	(85.8 - 100)

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

Table 4.11: Vaccines observed day of survey, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Pentavalent	5	100	(47.8 - 100)	10	100	(69.2 - 100)	19	100.0	(82.4 - 100)
Polio / IPV	5	100	(47.8 - 100)	10	100	(69.2 - 100)	19	100.0	(82.4 - 100)
Measles, mumps, rubella	5	100	(47.8 - 100)	10	100	(69.2 - 100)	19	100.0	(82.4 - 100)
Rotavirus	5	80	(28.4 - 99.5)	10	100	(69.2 - 100)	19	100.0	(82.4 - 100)
Pneumococcal conjugate	5	40	(5.3 - 85.3)	10	90	(55.5 - 99.7)	19	94.7	(74 - 99.9)
BCG	5	20	(0.5 - 71.6)	10	100	(69.2 - 100)	19	100.0	(82.4 - 100)

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

Table 4.12: Vaccines observed day of survey, complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Pentavalent	2	100	(15.8 - 100)	3	100	(29.2 - 100)	2	100	(15.8 - 100)
Polio / IPV	2	100	(15.8 - 100)	3	100	(29.2 - 100)	2	100	(15.8 - 100)
Measles, mumps, rubella	2	100	(15.8 - 100)	3	100	(29.2 - 100)	2	100	(15.8 - 100)
Rotavirus	2	100	(15.8 - 100)	3	100	(29.2 - 100)	2	100	(15.8 - 100)
Pneumococcal conjugate	2	50	(1.3 - 98.7)	3	100	(29.2 - 100)	2	100	(15.8 - 100)
BCG	2	0	(0 - 84.2)	3	100	(29.2 - 100)	2	100	(15.8 - 100)

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

4.5 Cold chain composite monitoring indicator

The tables below display composite performance in the SMI vaccine cold chain indicator (7000). Ambulatory and basic facilities are evaluated on the use of temperature monitoring charts and continuous recording of temperatures, twice daily for the past thirty days, for each functional refrigerator used to store vaccines. This indicator applies only to facilities which store vaccines. Components of this indicator are detailed in the below tables. It is important to note that the classification of the facility type **centro de salud** has changed across evaluations. At baseline, these facilities were classified as either ambulatory (if without doctor) or basic (if with doctor). At first follow-up all centros were classified ambulatory. At the second follow-up, all centros were classified basic. For the purposes of these comparisons, they are categorized according to the original classification during that round of data collection.

Table 4.13: Cold chain composite indicator, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Temperature monitoring chart for each functional refrigerator	23	56.5	(34.5 - 76.8)	18	94.4	(72.7 - 99.9)	21	95.2	(76.2 - 99.9)
Temperature recorded twice daily during past 30 days	23	26.1	(10.2 - 48.4)	18	88.9	(65.3 - 98.6)	21	71.4	(47.8 - 88.7)
Cold chain according to standard	23	26.1	(10.2 - 48.4)	18	88.9	(65.3 - 98.6)	21	71.4	(47.8 - 88.7)

* At first and second follow-up, only weekdays and non-holidays are evaluated for temperature recording. At baseline, all 30 days are considered.

Table 4.14: Cold chain composite indicator, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Temperature monitoring chart for each functional refrigerator	5	60	(14.7 - 94.7)	9	88.9	(51.8 - 99.7)	20	100	(83.2 - 100)
Temperature recorded twice daily during past 30 days	5	40	(5.3 - 85.3)	9	88.9	(51.8 - 99.7)	20	85	(62.1 - 96.8)
Cold chain according to standard	5	40	(5.3 - 85.3)	9	88.9	(51.8 - 99.7)	20	85	(62.1 - 96.8)

* At first and second follow-up, only weekdays and non-holidays are evaluated for temperature recording. At baseline, all 30 days are considered.

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 facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Offers family planning services	32	100.0	(89.1 - 100)	45	100.0	(92.1 - 100)	37	100.0	(90.5 - 100)
Family planning area									
Visual and auditory privacy	32	84.4	(67.2 - 94.7)	45	73.3	(58.1 - 85.4)	37	59.5	(42.1 - 75.2)
Non private area	32	12.5	(3.5 - 29)	45	17.8	(8 - 32.1)	37	37.8	(22.5 - 55.2)
Visual privacy only	32	0.0	(0 - 10.9)	45	8.9	(2.5 - 21.2)	37	0.0	(0 - 9.5)
Other	32	3.1	(0.1 - 16.2)	45	0.0	(0 - 7.9)	37	2.7	(0.1 - 14.2)
Do not provide service	32	0.0	(0 - 10.9)	45	0.0	(0 - 7.9)	37	0.0	(0 - 9.5)

* Family planning provision and area data missing from one facility at first follow-up.

Table 5.2: Family planning services provision, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Offers family planning services	5	100	(47.8 - 100)	11	100	(71.5 - 100)	20	95	(75.1 - 99.9)
Family planning area									
Visual and auditory privacy	5	100	(47.8 - 100)	11	100	(71.5 - 100)	20	75	(50.9 - 91.3)
Non private area	5	0	(0 - 52.2)	11	0	(0 - 28.5)	20	10	(1.2 - 31.7)
Visual privacy only	5	0	(0 - 52.2)	11	0	(0 - 28.5)	20	0	(0 - 16.8)
Other	5	0	(0 - 52.2)	11	0	(0 - 28.5)	20	5	(0.1 - 24.9)
Do not provide service	5	0	(0 - 52.2)	11	0	(0 - 28.5)	20	10	(1.2 - 31.7)

Table 5.3: Family planning services provision, complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Offers family planning services	3	100	(29.2 - 100)	3	100	(29.2 - 100)	3	100.0	(29.2 - 100)
Family planning area									
Visual and auditory privacy	2	100	(15.8 - 100)	3	100	(29.2 - 100)	3	66.7	(9.4 - 99.2)
Non private area	2	0	(0 - 84.2)	3	0	(0 - 70.8)	3	0.0	(0 - 70.8)
Visual privacy only	2	0	(0 - 84.2)	3	0	(0 - 70.8)	3	0.0	(0 - 70.8)
Other	2	0	(0 - 84.2)	3	0	(0 - 70.8)	3	0.0	(0 - 70.8)
Do not provide service	2	0	(0 - 84.2)	3	0	(0 - 70.8)	3	33.3	(0.8 - 90.6)

* Family planning area data missing from one facility at baseline.

5.2 Family planning services composite monitoring indicator

The family planning services composite indicator (7050) evaluates whether ambulatory and basic facilities have continuous three-month availability of all appropriate contraceptive methods. The following tables show composite indicator performance among these facilities. No kardex and not all family planning three-month stockout data were captured at baseline evaluation. It is important to note that the classification of the facility type **centro de salud** has changed across evaluations. At baseline, these facilities were classified as either ambulatory (if without doctor) or basic (if with doctor). At first follow-up all centros were classified ambulatory. At the second follow-up, all centros were classified basic. For the purposes of these comparisons, they are categorized according to the original classification during that round of data collection.

Table 5.4: Family planning services composite indicator, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Male condom	32	78.1	(60 - 90.7)	45	97.8	(88.2 - 99.9)	36	97.2	(85.5 - 99.9)
Oral contraceptive pill	32	81.2	(63.6 - 92.8)	45	97.8	(88.2 - 99.9)	36	86.1	(70.5 - 95.3)
Injectable	32	96.9	(83.8 - 99.9)	45	100.0	(92.1 - 100)	36	91.7	(77.5 - 98.2)
All methods observed day of survey	32	68.8	(50 - 83.9)	45	95.6	(84.9 - 99.5)	36	83.3	(67.2 - 93.6)
All methods continuously available in past three months	32	59.4	(40.6 - 76.3)	45	86.7	(73.2 - 94.9)	36	80.6	(64 - 91.8)
Family planning services according to standard	32	59.4	(40.6 - 76.3)	45	86.7	(73.2 - 94.9)	36	80.6	(64 - 91.8)

Table 5.5: Family planning services composite indicator, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Male condom	5	80	(28.4 - 99.5)	11	100.0	(71.5 - 100)	18	88.9	(65.3 - 98.6)
Oral contraceptive pill	5	60	(14.7 - 94.7)	11	100.0	(71.5 - 100)	18	83.3	(58.6 - 96.4)
Injectable	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	18	88.9	(65.3 - 98.6)
Intrauterine device	5	80	(28.4 - 99.5)	11	100.0	(71.5 - 100)	18	94.4	(72.7 - 99.9)
All methods observed day of survey	5	60	(14.7 - 94.7)	11	100.0	(71.5 - 100)	18	83.3	(58.6 - 96.4)
All methods continuously available in past three months	5	60	(14.7 - 94.7)	11	90.9	(58.7 - 99.8)	18	61.1	(35.7 - 82.7)
Family planning services according to standard	5	60	(14.7 - 94.7)	11	90.9	(58.7 - 99.8)	18	61.1	(35.7 - 82.7)

* IUD three-month stock not captured at baseline.

† IUD kardex not captured at first follow-up.

Although the composite family planning monitoring indicator only evaluates stock of contraceptive methods at ambulatory and basic facilities, this data was also captured for complete facilities, including access to surgical equipment and materials for conducting tubal ligation and vasectomy operations.

Table 5.6: Family planning methods observed, complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Male condom	2	100	(15.8 - 100)	3	100.0	(29.2 - 100)	2	100	(15.8 - 100)
Oral contraceptive pill	2	50	(1.3 - 98.7)	3	100.0	(29.2 - 100)	2	100	(15.8 - 100)
Injectable	2	100	(15.8 - 100)	3	100.0	(29.2 - 100)	2	100	(15.8 - 100)
Implant	2	0	(0 - 84.2)	-	-	-	2	0	(0 - 84.2)
Intrauterine device	2	50	(1.3 - 98.7)	3	100.0	(29.2 - 100)	2	100	(15.8 - 100)
IUD insertion equipment	-	-	-	3	100.0	(29.2 - 100)	2	100	(15.8 - 100)
Equipment for tubal ligation	2	0	(0 - 84.2)	3	66.7	(9.4 - 99.2)	2	50	(1.3 - 98.7)
Equipment for vasectomy	2	0	(0 - 84.2)	3	66.7	(9.4 - 99.2)	2	50	(1.3 - 98.7)
Other contraceptive	2	0	(0 - 84.2)	3	33.3	(0.8 - 90.6)	2	0	(0 - 84.2)

5.3 Postpartum contraception administration

During the medical record review portion of the survey, doctors and nurses evaluated immediate postpartum care records from uncomplicated deliveries in the past two years based on whether the woman received contraception during postpartum care. These records were reviewed at basic and complete facilities.

Table 5.7: Postpartum contraception administration, uncomplicated deliveries in past two years at basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Received appropriate contraception:	35	31.4	(16.9 - 49.3)	67	82.1	(70.8 - 90.4)	92	83.7	(74.5 - 90.6)
Condom	32	0.0	(0 - 10.9)	57	1.8	(0 - 9.4)	92	4.3	(1.2 - 10.8)
Injectable	32	28.1	(13.7 - 46.7)	57	68.4	(54.8 - 80.1)	92	71.7	(61.4 - 80.6)
Intrauterine device	32	3.1	(0.1 - 16.2)	57	19.3	(10 - 31.9)	82	2.4	(0.3 - 8.5)
Tubal ligation	32	3.1	(0.1 - 16.2)	57	8.8	(2.9 - 19.3)	82	6.1	(2 - 13.7)

Table 5.8: Postpartum contraception administration, uncomplicated deliveries in past two years at complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Received appropriate contraception:	11	81.8	(48.2 - 97.7)	12	66.7	(34.9 - 90.1)	26	92.3	(74.9 - 99.1)
Condom	10	20.0	(2.5 - 55.6)	8	12.5	(0.3 - 52.7)	26	3.8	(0.1 - 19.6)
Injectable	10	50.0	(18.7 - 81.3)	8	100.0	(63.1 - 100)	26	73.1	(52.2 - 88.4)
Intrauterine device	10	10.0	(0.3 - 44.5)	8	0.0	(0 - 36.9)	26	3.8	(0.1 - 19.6)
Tubal ligation	10	20.0	(2.5 - 55.6)	8	0.0	(0 - 36.9)	26	11.5	(2.4 - 30.2)

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 basic and complete facilities.

Table 6.1: Antenatal care service provision, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Offers antenatal care services	32	100.0	(89.1 - 100)	45	100.0	(92.1 - 100)	37	100.0	(90.5 - 100)
Antenatal care area									
Visual and auditory privacy	32	90.6	(75 - 98)	46	69.6	(54.2 - 82.3)	37	64.9	(47.5 - 79.8)
Visual privacy only	32	3.1	(0.1 - 16.2)	46	10.9	(3.6 - 23.6)	37	10.8	(3 - 25.4)
Non private area	32	6.2	(0.8 - 20.8)	46	17.4	(7.8 - 31.4)	37	24.3	(11.8 - 41.2)
Other	32	0.0	(0 - 10.9)	46	0.0	(0 - 7.7)	37	0.0	(0 - 9.5)
Do not provide service	32	0.0	(0 - 10.9)	46	2.2	(0.1 - 11.5)	37	0.0	(0 - 9.5)

* Antenatal care service provision data missing from one facility at first follow-up.

Table 6.2: Antenatal care and delivery service provision, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Offers antenatal care services	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	20	85	(62.1 - 96.8)
Offers (non-urgent) delivery services	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	20	95	(75.1 - 99.9)
Antenatal care area									
Visual and auditory privacy	5	100	(47.8 - 100)	11	90.9	(58.7 - 99.8)	20	95	(75.1 - 99.9)
Visual privacy only	5	0	(0 - 52.2)	11	0.0	(0 - 28.5)	20	0	(0 - 16.8)
Non private area	5	0	(0 - 52.2)	11	9.1	(0.2 - 41.3)	20	5	(0.1 - 24.9)
Other	5	0	(0 - 52.2)	11	0.0	(0 - 28.5)	20	0	(0 - 16.8)
Do not provide service	5	0	(0 - 52.2)	11	0.0	(0 - 28.5)	20	0	(0 - 16.8)
Delivery area									
Visual and auditory privacy	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	20	85	(62.1 - 96.8)
Visual privacy only	5	0	(0 - 52.2)	11	0.0	(0 - 28.5)	20	5	(0.1 - 24.9)
Non private area	5	0	(0 - 52.2)	11	0.0	(0 - 28.5)	20	5	(0.1 - 24.9)
Other	5	0	(0 - 52.2)	11	0.0	(0 - 28.5)	20	0	(0 - 16.8)
Do not provide service	5	0	(0 - 52.2)	11	0.0	(0 - 28.5)	20	5	(0.1 - 24.9)

Table 6.3: Antenatal care and delivery service provision, complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Offers antenatal care services	3	66.7	(9.4 - 99.2)	3	33.3	(0.8 - 90.6)	3	66.7	(9.4 - 99.2)
Offers (non-urgent) delivery services	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Antenatal care area									
Visual and auditory privacy	2	100.0	(15.8 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Visual privacy only	2	0.0	(0 - 84.2)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)
Non private area	2	0.0	(0 - 84.2)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)
Other	2	0.0	(0 - 84.2)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)
Do not provide service	2	0.0	(0 - 84.2)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)
Delivery area									
Visual and auditory privacy	2	100.0	(15.8 - 100)	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)
Visual privacy only	2	0.0	(0 - 84.2)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)
Non private area	2	0.0	(0 - 84.2)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)
Other	2	0.0	(0 - 84.2)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)
Do not provide service	2	0.0	(0 - 84.2)	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)

* Antenatal care and delivery area data missing from one facility at baseline.

6.2 ANC and PPC equipment

At facilities which indicated that they provide the relevant services, surveyors observed the availability and functionality of equipment necessary for antenatal and postpartum care. The standards for antenatal and postpartum care are determined by the SMI composite monitoring indicator (7020). The following tables display the percent of facilities at which at least one functional item of equipment was observed.

Table 6.4: ANC and PPC equipment observed and functional, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Standing scale with height rod	32	90.6	(75 - 98)	45	97.8	(88.2 - 99.9)	37	97.3	(85.8 - 99.9)
Gynecological table	32	90.6	(75 - 98)	45	97.8	(88.2 - 99.9)	37	97.3	(85.8 - 99.9)
Lamp	32	53.1	(34.7 - 70.9)	45	82.2	(67.9 - 92)	37	78.4	(61.8 - 90.2)
CLAP / measuring tape	32	81.2	(63.6 - 92.8)	45	100.0	(92.1 - 100)	37	100.0	(90.5 - 100)
Sphygmomanometer	32	87.5	(71 - 96.5)	45	97.8	(88.2 - 99.9)	37	100.0	(90.5 - 100)
Stethoscope	32	90.6	(75 - 98)	45	97.8	(88.2 - 99.9)	37	100.0	(90.5 - 100)
Pregnancy wheel	32	81.2	(63.6 - 92.8)	45	95.6	(84.9 - 99.5)	37	94.6	(81.8 - 99.3)
All ANC/PPC equipment observed and functional	32	31.2	(16.1 - 50)	45	75.6	(60.5 - 87.1)	37	73.0	(55.9 - 86.2)

Table 6.5: ANC and PPC equipment observed and functional, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Standing scale with height rod	5	80	(28.4 - 99.5)	11	100.0	(71.5 - 100)	20	90	(68.3 - 98.8)
Gynecological table	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	20	100	(83.2 - 100)
Lamp	5	80	(28.4 - 99.5)	11	90.9	(58.7 - 99.8)	20	95	(75.1 - 99.9)
CLAP / measuring tape	5	40	(5.3 - 85.3)	11	100.0	(71.5 - 100)	20	100	(83.2 - 100)
Sphygmomanometer	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	20	100	(83.2 - 100)
Stethoscope	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	20	100	(83.2 - 100)
Pregnancy wheel	5	20	(0.5 - 71.6)	11	100.0	(71.5 - 100)	20	90	(68.3 - 98.8)
Intrauterine device kit	5	20	(0.5 - 71.6)	11	100.0	(71.5 - 100)	20	95	(75.1 - 99.9)
All ANC/PPC equipment observed and functional	5	0	(0 - 52.2)	11	90.9	(58.7 - 99.8)	20	75	(50.9 - 91.3)

6.3 ANC and PPC laboratory inputs

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

Table 6.6: ANC and PPC laboratory inputs, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Rapid HIV test	5	40	(5.3 - 85.3)	11	100.0	(71.5 - 100)	20	90	(68.3 - 98.8)
Rapid syphilis test	5	60	(14.7 - 94.7)	11	90.9	(58.7 - 99.8)	20	80	(56.3 - 94.3)
Serological mixer	-	-	-	11	100.0	(71.5 - 100)	20	90	(68.3 - 98.8)
Urine analysis	-	-	-	11	100.0	(71.5 - 100)	20	90	(68.3 - 98.8)
Glucose test	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	20	100	(83.2 - 100)
Blood test equipment	-	-	-	11	100.0	(71.5 - 100)	20	100	(83.2 - 100)
Microscope	-	-	-	11	100.0	(71.5 - 100)	20	100	(83.2 - 100)
Automated cell counter	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	20	100	(83.2 - 100)
All lab inputs observed	5	0	(0 - 52.2)	11	100.0	(71.5 - 100)	20	80	(56.3 - 94.3)

* Serological mixer, urine analysis, blood analysis equipment, and microscope not captured at baseline.

6.4 ANC/PPC composite indicator

The table below displays performance on the SMI composite monitoring indicator for antenatal and postpartum care (7020). This indicator is evaluated at ambulatory and basic facilities. Only basic facilities are required to show availability of laboratory inputs. It is important to note that the classification of the facility type **centro de salud** has changed across evaluations. At baseline, these facilities were classified as either ambulatory (if without doctor) or basic (if with doctor). At first follow-up all centros were classified ambulatory. At the second follow-up, all centros were classified basic. For the purposes of

these comparisons, they are categorized according to the original classification during that round of data collection.

Table 6.7: ANC and PPC composite indicator, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
All ANC/PPC equipment observed and functional	32	31.2	(16.1 - 50)	45	75.6	(60.5 - 87.1)	37	73	(55.9 - 86.2)
ANC/PPC according to standard	32	31.2	(16.1 - 50)	45	75.6	(60.5 - 87.1)	37	73	(55.9 - 86.2)

Table 6.8: ANC and PPC composite indicator, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
All ANC/PPC equipment observed and functional	5	0	(0 - 52.2)	11	90.9	(58.7 - 99.8)	20	75	(50.9 - 91.3)
All lab inputs observed	5	0	(0 - 52.2)	11	100.0	(71.5 - 100)	20	80	(56.3 - 94.3)
ANC/PPC according to standard	5	0	(0 - 52.2)	11	90.9	(58.7 - 99.8)	20	60	(36.1 - 80.9)

6.5 Antenatal care medical record review: Timely first ANC visit performance indicator

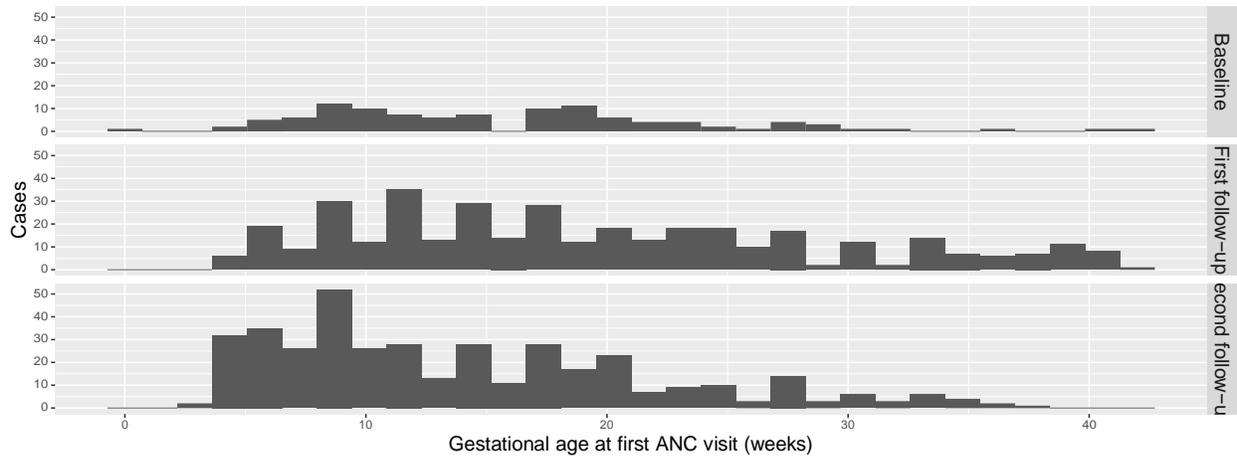
Doctors and nurses systematically selected and reviewed antenatal care (ANC) records from ambulatory facilities for women who delivered in the last two years. Records were evaluated on the timeliness of the first ANC visit using reported gestational age at first and second follow-up. At baseline, gestational age was calculated based on date of last menstruation in the medical record. According to the SMI performance indicator, the first antenatal care visit should occur at or within twelve weeks of gestation.

Table 6.9: ANC timeliness, medical records from ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
First ANC visit within 12 weeks	105	39	(29.7 - 49.1)	371	29.9	(25.3 - 34.9)	389	51.7	(46.6 - 56.7)

* At baseline, this indicator was calculated using records from ambulatory and basic facilities. Current value reflects only ambulatory baseline facilities for comparability.

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



6.6 Antenatal care medical record review: four ANC 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, uterine height + fetal heart rate + fetal movement 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 6.10: At least four ANC visits to standard, medical records from ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
At least four ANC visits	110	59.1	(49.3 - 68.4)	386	30.1	(25.5 - 34.9)	394	33.8	(29.1 - 38.7)
All appropriate checks performed, at least four ANC visits	110	57.3	(47.5 - 66.7)	386	28.2	(23.8 - 33)	394	27.7	(23.3 - 32.4)
All lab tests performed at least once during pregnancy:									
Blood group	110	75.5	(66.3 - 83.2)	386	78.8	(74.3 - 82.7)	394	35.5	(30.8 - 40.5)
Rh factor	110	75.5	(66.3 - 83.2)	386	78.5	(74.1 - 82.5)	394	35.5	(30.8 - 40.5)
Blood glucose	110	64.5	(54.9 - 73.4)	386	76.7	(72.1 - 80.8)	394	28.4	(24 - 33.2)
HIV test	-	-	-	386	90.9	(87.6 - 93.6)	394	35.5	(30.8 - 40.5)
Syphilis test (VDRL / RPR*)	110	73.6	(64.4 - 81.6)	386	74.9	(70.2 - 79.1)	394	28.7	(24.3 - 33.4)
Hemoglobin	110	73.6	(64.4 - 81.6)	386	76.9	(72.4 - 81.1)	394	23.6	(19.5 - 28.1)
Urinalysis	110	76.4	(67.3 - 83.9)	386	86.3	(82.4 - 89.5)	394	29.7	(25.2 - 34.5)
Antenatal care performed according to standard	110	38.2	(29.1 - 47.9)	386	19.4	(15.6 - 23.7)	394	6.1	(3.9 - 8.9)

* RPR not captured as alternative to VDRL at baseline or first follow-up.

† HIV test not captured at baseline.

‡ At baseline, fetal heart rate, fetal movement, and uterine height data only captured if first visit <= 20 weeks gestational age.

Table 6.11: At least four ANC visits to standard, medical records from basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
At least four ANC visits	25	56	(34.9 - 75.6)	96	34.4	(25 - 44.8)	96	54.2	(43.7 - 64.4)
All appropriate checks performed, at least four ANC visits	25	56	(34.9 - 75.6)	96	31.2	(22.2 - 41.5)	96	51.0	(40.6 - 61.4)
All lab tests performed at least once during pregnancy:									
Blood group	25	92	(74 - 99)	96	88.5	(80.4 - 94.1)	96	65.6	(55.2 - 75)
Rh factor	25	88	(68.8 - 97.5)	96	88.5	(80.4 - 94.1)	96	65.6	(55.2 - 75)
Blood glucose	25	88	(68.8 - 97.5)	96	77.1	(67.4 - 85)	96	57.3	(46.8 - 67.3)
HIV test	-	-	-	96	92.7	(85.6 - 97)	96	60.4	(49.9 - 70.3)
Syphilis test (VDRL / RPR*)	25	76	(54.9 - 90.6)	96	84.4	(75.5 - 91)	96	62.5	(52 - 72.2)
Hemoglobin	25	84	(63.9 - 95.5)	96	85.4	(76.7 - 91.8)	96	54.2	(43.7 - 64.4)
Urinalysis	25	68	(46.5 - 85.1)	96	90.6	(82.9 - 95.6)	96	56.2	(45.7 - 66.4)
Antenatal care performed according to standard	25	40	(21.1 - 61.3)	96	22.9	(15 - 32.6)	96	32.3	(23.1 - 42.6)

* RPR not captured as alternative to VDRL at baseline or first follow-up.

† HIV test not captured at baseline.

‡ At baseline, fetal heart rate, fetal movement, and uterine height data only captured if first visit <= 20 weeks gestational age.

6.7 Medical record review: Active management of third stage of labor

Doctors and nurses systematically selected and reviewed delivery records from basic and complete facilities for women who delivered in the last two years. According to the SMI monitoring indicator

(4095), which determines the standards for active management of the third stage of labor, oxytocin or another uterotonic should be administered after birth. Records are required to have the time and date of uterotonic administration recorded. The record must also show application of a uterine massage.

Table 6.12: Active management of third stage of labor, medical records from basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Oxytocin administered	66	97.0	(89.5 - 99.6)	164	80.5	(73.6 - 86.3)	240	95.4	(91.9 - 97.7)
Other uterotonic administered	66	3.0	(0.4 - 10.5)	140	2.1	(0.4 - 6.1)	240	0.8	(0.1 - 3)
Active management of third stage of labor according to standard	66	78.8	(67 - 87.9)	164	68.3	(60.6 - 75.3)	240	90.0	(85.5 - 93.5)

Table 6.13: Active management of third stage of labor, medical records from complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Oxytocin administered	24	95.8	(78.9 - 99.9)	46	89.1	(76.4 - 96.4)	76	88.2	(78.7 - 94.4)
Other uterotonic administered	24	4.2	(0.1 - 21.1)	46	0.0	(0 - 7.7)	76	0.0	(0 - 4.7)
Active management of third stage of labor according to standard	24	95.8	(78.9 - 99.9)	46	52.2	(36.9 - 67.1)	76	75.0	(63.7 - 84.2)

6.8 Medical record review: Partograph revision

Doctors and nurses systematically selected and reviewed uncomplicated delivery records from basic and complete facilities in the past two years. During this review, delivery records were evaluated for partograph revision. Standards for partograph revision are determined by the SMI monitoring indicator (4065). Partograph data from the baseline evaluation is not comparable.

Table 6.14: Partograph revision, medical records from basic facilities

	First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI
Imminent birth or elective C-section	171	66.1	(58.5 - 73.1)	240	75.0	(69 - 80.3)
Partograph included and filled out	171	61.4	(53.7 - 68.7)	240	83.8	(78.5 - 88.2)
If partograph filled out:						
Dilation > 4.5cm	105	67.6	(57.8 - 76.4)	201	39.8	(33 - 46.9)
Fetal heart rate and alert curve recorded if dilation > 4.5cm	71	98.6	(92.4 - 100)	80	100.0	(95.5 - 100)
Alert curve surpassed	105	11.4	(6 - 19.1)	201	10.0	(6.2 - 14.9)
Note exists within 30 minutes if alert curve surpassed	12	58.3	(27.7 - 84.8)	20	45.0	(23.1 - 68.5)
Fetal heart rate < 120 bpm	105	4.8	(1.6 - 10.8)	201	1.0	(0.1 - 3.5)
Note exists within 30 minutes if fetal heart rate < 120 bpm	5	20.0	(0.5 - 71.6)	2	0.0	(0 - 84.2)
Partograph revised according to standard	172	91.3	(86 - 95)	240	93.3	(89.4 - 96.1)

Table 6.15: Partograph revision, medical records from complete facilities

	First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI
Imminent birth or elective C-section	49	100.0	(92.7 - 100)	76	85.5	(75.6 - 92.5)
Partograph included and filled out	49	55.1	(40.2 - 69.3)	76	76.3	(65.2 - 85.3)
If partograph filled out:						
Dilation > 4.5cm	27	77.8	(57.7 - 91.4)	58	67.2	(53.7 - 79)
Fetal heart rate and alert curve recorded if dilation > 4.5cm	21	95.2	(76.2 - 99.9)	39	97.4	(86.5 - 99.9)
Alert curve surpassed	27	0.0	(0 - 12.8)	58	39.7	(27 - 53.4)
Note exists within 30 minutes if alert curve surpassed	-	-	-	23	95.7	(78.1 - 99.9)
Fetal heart rate < 120 bpm	27	0.0	(0 - 12.8)	58	1.7	(0 - 9.2)
Note exists within 30 minutes if fetal heart rate < 120 bpm	-	-	-	1	0.0	(0 - 97.5)
Partograph revised according to standard	49	98.0	(89.1 - 99.9)	76	82.9	(72.5 - 90.6)

6.9 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 monitoring indicator (4050). Delivery patients must have all appropriate checks performed four times in the first two hours after delivery and once at discharge. Immediate maternal postpartum care data from the baseline evaluation is not comparable.

Table 6.16: Maternal immediate postpartum care, medical records from basic facilities

	First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI
Checked four times in first two hours:						
Blood pressure	121	78.5	(70.1 - 85.5)	214	84.1	(78.5 - 88.7)
Temperature	121	68.6	(59.5 - 76.7)	214	84.1	(78.5 - 88.7)
Heart rate / pulse	121	68.6	(59.5 - 76.7)	214	81.3	(75.4 - 86.3)
All checks at discharge	121	86.0	(78.5 - 91.6)	214	84.6	(79 - 89.1)
Immediate maternal PPC to standard	121	62.0	(52.7 - 70.7)	214	70.1	(63.5 - 76.1)

Table 6.17: Maternal immediate postpartum care, medical records from complete facilities

	First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI
Checked four times in first two hours:						
Blood pressure	45	26.7	(14.6 - 41.9)	53	100.0	(93.3 - 100)
Temperature	45	0.0	(0 - 7.9)	53	100.0	(93.3 - 100)
Heart rate / pulse	45	0.0	(0 - 7.9)	53	100.0	(93.3 - 100)
All checks at discharge	45	88.9	(75.9 - 96.3)	53	88.7	(77 - 95.7)
Immediate maternal PPC to standard	45	0.0	(0 - 7.9)	53	88.7	(77 - 95.7)

6.10 Medical record review: Immediate neonate postpartum care

Doctors and nurses reviewed immediate postpartum records from uncomplicated deliveries in the past two years at basic and complete facilities to evaluate immediate postpartum neonatal care. Standards for immediate postpartum neonatal care are determined by the SMI monitoring indicator (4103). Neonates must receive all appropriate checks and procedures detailed in the tables below.

Table 6.18: Immediate neonate postpartum care, medical records from basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Vitamin K	50	94	(83.5 - 98.7)	135	98.5	(94.8 - 99.8)	214	90.7	(85.9 - 94.2)
Application of prophylaxis with oxytetracycline ophthalmic/chloramphenicol	50	90	(78.2 - 96.7)	135	98.5	(94.8 - 99.8)	214	90.2	(85.4 - 93.8)
Curing the umbilical cord with water and chlorhexidine	50	72	(57.5 - 83.8)	135	94.8	(89.6 - 97.9)	214	70.6	(64 - 76.6)
Evaluation for the presence of malformations	50	90	(78.2 - 96.7)	135	92.6	(86.8 - 96.4)	214	86.0	(80.6 - 90.3)
BCG vaccine	50	68	(53.3 - 80.5)	135	89.6	(83.2 - 94.2)	214	85.5	(80.1 - 89.9)
APGAR score (1 or 5 minutes)	50	100	(92.9 - 100)	135	100.0	(97.3 - 100)	214	92.5	(88.1 - 95.7)
Respiratory rate	50	22	(11.5 - 36)	135	74.8	(66.6 - 81.9)	214	58.9	(52 - 65.5)
Weight	50	96	(86.3 - 99.5)	135	99.3	(95.9 - 100)	214	91.1	(86.5 - 94.6)
Height	50	94	(83.5 - 98.7)	135	91.1	(85 - 95.3)	214	91.6	(87 - 94.9)
Head circumference	50	86	(73.3 - 94.2)	135	91.1	(85 - 95.3)	214	91.1	(86.5 - 94.6)
Immediate neonate PPC to standard	50	8	(2.2 - 19.2)	135	63.7	(55 - 71.8)	214	45.8	(39 - 52.7)

Table 6.19: Immediate neonate postpartum care, medical records from complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Vitamin K	19	100.0	(82.4 - 100)	49	100.0	(92.7 - 100)	65	98.5	(91.7 - 100)
Application of prophylaxis with oxytetracycline ophthalmic/chloramphenicol	19	94.7	(74 - 99.9)	49	100.0	(92.7 - 100)	65	98.5	(91.7 - 100)
Curing the umbilical cord with water and chlorhexidine	19	10.5	(1.3 - 33.1)	49	100.0	(92.7 - 100)	65	63.1	(50.2 - 74.7)
Evaluation for the presence of malformations	19	100.0	(82.4 - 100)	49	95.9	(86 - 99.5)	65	98.5	(91.7 - 100)
BCG vaccine	19	94.7	(74 - 99.9)	49	91.8	(80.4 - 97.7)	65	96.9	(89.3 - 99.6)
APGAR score (1 or 5 minutes)	19	100.0	(82.4 - 100)	49	100.0	(92.7 - 100)	65	100.0	(94.5 - 100)
Respiratory rate	19	36.8	(16.3 - 61.6)	49	87.8	(75.2 - 95.4)	65	58.5	(45.6 - 70.6)
Weight	19	94.7	(74 - 99.9)	49	98.0	(89.1 - 99.9)	65	95.4	(87.1 - 99)
Height	19	94.7	(74 - 99.9)	49	95.9	(86 - 99.5)	65	90.8	(81 - 96.5)
Head circumference	19	94.7	(74 - 99.9)	49	91.8	(80.4 - 97.7)	65	90.8	(81 - 96.5)
Immediate neonate PPC to standard	19	5.3	(0.1 - 26)	49	79.6	(65.7 - 89.8)	65	36.9	(25.3 - 49.8)

6.11 Sociocultural conditions

During the questionnaire component of the survey, interviewers asked representatives of *centros de salud* whether the facility has taken action to adapt services to the sociocultural conditions of women at delivery, as specified by the SMI monitoring indicator (8870). Sociocultural adaptability includes employing indigenous language speakers, allowing relatives or others to accompany the pregnant

woman, allowing the woman to dress, move about, and give birth in the position that she chooses, and providing the placenta by request.

Table 6.20: Sociocultural adaptiveness, centros de salud

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Services adapt to sociocultural conditions	3	100	(29.2 - 100)	7	71.4	(29 - 96.3)	8	87.5	(47.3 - 99.7)

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 provision, second follow-up evaluation

	Basic Facilities			Complete Facilities		
	N	%	CI	N	%	CI
Emergency care room / area						
Visual and auditory privacy	19	84.2	(60.4 - 96.6)	3	100	(29.2 - 100)
Visual privacy only	19	5.3	(0.1 - 26)	3	0	(0 - 70.8)
Non-private area	19	10.5	(1.3 - 33.1)	3	0	(0 - 70.8)
Other	19	0.0	(0 - 17.6)	3	0	(0 - 70.8)
Do not provide service	19	0.0	(0 - 17.6)	3	0	(0 - 70.8)

* Emergency care area data not captured at baseline and first follow-up evaluations.

† Facilities which had no delivery care area were not asked about emergency care area.

7.2 Emergency care composite indicator: drugs and stockout

The SMI composite monitoring indicator (7030) 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 basic facilities. It is important to note that the classification of the facility type **centro de salud** has changed across evaluations. At baseline, these facilities were classified as either ambulatory (if without doctor) or basic (if with doctor). At first follow-up all centros were classified ambulatory. At the second follow-up, all centros were classified basic. For the purposes of these comparisons, they are categorized according to the original classification during that round of data collection.

Table 7.2: Emergency care composite indicator, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Dexamethasone	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	19	100.0	(82.4 - 100)
Antibiotics	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	19	100.0	(82.4 - 100)
Gentamicin	5	80	(28.4 - 99.5)	11	100.0	(71.5 - 100)	19	100.0	(82.4 - 100)
Magnesium sulfate	5	80	(28.4 - 99.5)	11	100.0	(71.5 - 100)	19	94.7	(74 - 99.9)
Hydralazine	5	80	(28.4 - 99.5)	11	100.0	(71.5 - 100)	19	100.0	(82.4 - 100)
Ergobasin / ergonovine maleate / ergometrine / oxytocin	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	19	100.0	(82.4 - 100)
All drugs observed day of survey	5	60	(14.7 - 94.7)	11	100.0	(71.5 - 100)	19	94.7	(74 - 99.9)
All drugs continuously available in past three months	5	40	(5.3 - 85.3)	11	90.9	(58.7 - 99.8)	19	68.4	(43.4 - 87.4)
Emergency care according to standard	5	40	(5.3 - 85.3)	11	90.9	(58.7 - 99.8)	19	68.4	(43.4 - 87.4)

* Kardex data and three month-stock data not captured for all drugs at baseline evaluation.

7.3 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 7.3: Uterine tamponade balloon for hemorrhage management, second follow-up evaluation

	Basic Facilities			Complete Facilities		
	N	%	CI	N	%	CI
Facility uses tamponade to managed obstetric hemorrhage	20	25	(8.7 - 49.1)	3	66.7	(9.4 - 99.2)
Type						
Bakri	5	0	(0 - 52.2)	2	50.0	(1.3 - 98.7)
Foley catheter	5	80	(28.4 - 99.5)	2	0.0	(0 - 84.2)
Condom-based balloon	5	20	(0.5 - 71.6)	2	0.0	(0 - 84.2)
Do not know	5	0	(0 - 52.2)	2	50.0	(1.3 - 98.7)
Assembly kit						
Facility has tamponade kit	5	100	(47.8 - 100)	2	100.0	(15.8 - 100)
Kit commercially assembled	5	40	(5.3 - 85.3)	2	100.0	(15.8 - 100)
Kit prepared from available materials	5	60	(14.7 - 94.7)	2	0.0	(0 - 84.2)
Staff training						
Staff trained in tamponade use	20	60	(36.1 - 80.9)	3	100.0	(29.2 - 100)
Staff trained in tamponade assembly	20	50	(27.2 - 72.8)	3	100.0	(29.2 - 100)

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

7.4 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 during delivery care. 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. During this data collection period, complications records were reviewed for both the baseline and second follow-up evaluations.

Table 7.4: Distribution of obstetric complications, basic facilities

	Baseline	Second Follow-up
Sepsis	17	34
Hemorrhage	54	114
Pre-eclampsia	25	69
Eclampsia	2	6

Table 7.5: Distribution of obstetric complications, complete facilities

	Baseline	Second Follow-up
Sepsis	10	8
Hemorrhage	45	19
Pre-eclampsia	39	47
Eclampsia	5	5

Table 7.6: Distribution of neonatal complications, basic facilities

	Baseline	Second Follow-up
Sepsis	71	173
Low birth weight	23	25
Asphyxia	11	30
Prematurity	1	5

Table 7.7: Distribution of neonatal complications, complete facilities

	Baseline	Second Follow-up
Sepsis	44	26
Low birth weight	16	20
Asphyxia	24	10
Prematurity	0	0

7.5 Management of obstetric complications in previous two years (sepsis, hemorrhage, pre-eclampsia, and eclampsia)

7.5.1 Sepsis (obstetric)

During the medical record review, doctors and nurses systematically evaluated records which met the criteria for sepsis complication according to the SMI standards. The obstetric complications indicator determines the standard treatment for each potential 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. The woman must be administered antibiotics (*basic and complete facilities*):
4. If applicable, the woman must also have received appropriate care for any of the sepsis cause scenarios detailed in the SMI maternal complications indicator.

Table 7.8 and Table 7.9 display sepsis management as indicated in obstetric medical records.

Table 7.8: Maternal sepsis management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	17	94.12	(71.31 - 99.85)	34	94.12	(80.32 - 99.28)
Pulse / heart rate	17	100.00	(80.49 - 100)	34	97.06	(84.67 - 99.93)
Blood pressure	17	100.00	(80.49 - 100)	34	97.06	(84.67 - 99.93)
Temperature	17	94.12	(71.31 - 99.85)	34	100.00	(89.72 - 100)
Antibiotics administered	17	88.24	(63.56 - 98.54)	34	97.06	(84.67 - 99.93)
Causes treated appropriately	7	71.43	(29.04 - 96.33)	13	76.92	(46.19 - 94.96)
Neonatal sepsis managed according to SMI standard	17	76.47	(50.1 - 93.19)	34	82.35	(65.47 - 93.24)

Table 7.9: Maternal sepsis management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	10	100	(69.15 - 100)	8	100.0	(63.06 - 100)
Pulse / heart rate	10	100	(69.15 - 100)	8	100.0	(63.06 - 100)
Blood pressure	10	100	(69.15 - 100)	8	100.0	(63.06 - 100)
Temperature	10	100	(69.15 - 100)	8	100.0	(63.06 - 100)
Lab tests	10	50	(18.71 - 81.29)	8	37.5	(8.52 - 75.51)
Complete blood test	10	30	(6.67 - 65.25)	8	37.5	(8.52 - 75.51)
Leukocyte count	10	90	(55.5 - 99.75)	8	87.5	(47.35 - 99.68)
Platelet count	10	60	(26.24 - 87.84)	8	75.0	(34.91 - 96.81)
Hemoglobin	10	50	(18.71 - 81.29)	8	37.5	(8.52 - 75.51)
Hematocrit	10	90	(55.5 - 99.75)	8	87.5	(47.35 - 99.68)
Antibiotics administered	10	100	(69.15 - 100)	8	87.5	(47.35 - 99.68)
Causes treated appropriately	6	100	(54.07 - 100)	5	80.0	(28.36 - 99.49)
Neonatal sepsis managed according to SMI standard	10	50	(18.71 - 81.29)	8	37.5	(8.52 - 75.51)

7.5.2 Hemorrhage

During the medical record review, doctors and nurses systematically evaluated records which met the criteria for hemorrhagic complication according to the SMI standards. The obstetric complications indicator determines the standard treatment for each potential 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.

Table 7.10 and Table 7.11 display hemorrhage management as indicated in obstetric medical records.

Table 7.10: Maternal hemorrhage management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	54	92.59	(82.11 - 97.94)	114	97.37	(92.5 - 99.45)
Pulse / heart rate	54	92.59	(82.11 - 97.94)	114	99.12	(95.21 - 99.98)
Blood pressure	54	98.15	(90.11 - 99.95)	114	97.37	(92.5 - 99.45)
Ringer's lactate / Hartmann's / saline solution administered	54	83.33	(70.71 - 92.08)	114	84.21	(76.2 - 90.37)
Causes treated appropriately	32	78.12	(60.03 - 90.72)	60	65.00	(51.6 - 76.87)
Hemorrhage managed according to SMI standard	54	75.93	(62.36 - 86.51)	114	70.18	(60.89 - 78.38)

Table 7.11: Maternal hemorrhage management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	45	100.00	(92.13 - 100)	19	100.00	(82.35 - 100)
Pulse / heart rate	45	100.00	(92.13 - 100)	19	100.00	(82.35 - 100)
Blood pressure	45	100.00	(92.13 - 100)	19	100.00	(82.35 - 100)
Lab tests	45	20.00	(9.58 - 34.6)	19	63.16	(38.36 - 83.71)
Hematocrit	45	88.89	(75.95 - 96.29)	19	100.00	(82.35 - 100)
Hemoglobin	45	20.00	(9.58 - 34.6)	19	63.16	(38.36 - 83.71)
Platelet count	45	80.00	(65.4 - 90.42)	19	100.00	(82.35 - 100)
Ringer's lactate / Hartmann's / saline solution administered	45	93.33	(81.73 - 98.6)	19	84.21	(60.42 - 96.62)
Causes treated appropriately	18	94.44	(72.71 - 99.86)	12	75.00	(42.81 - 94.51)
Hemorrhage managed according to SMI standard	45	17.78	(8 - 32.05)	19	52.63	(28.86 - 75.55)

7.5.3 Pre-eclampsia

During the medical record review, doctors and nurses systematically evaluated records 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
- Pulse / heart rate
- Respiratory rate
- Patellar reflex (*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
- Hydralazine / labetalol / nifedipine (if diastolic blood pressure > 110 at first checkup)

4. Woman was referred to a complete facility (*basic facility only*)

Table 7.12 and Table 7.13 display pre-eclampsia management as indicated in obstetric medical records.

Table 7.12: Maternal pre-eclampsia management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	25	96	(79.65 - 99.9)	69	95.65	(87.82 - 99.09)
Pulse / heart rate	25	100	(86.28 - 100)	69	97.10	(89.92 - 99.65)
Blood pressure	25	100	(86.28 - 100)	69	97.10	(89.92 - 99.65)
Respiratory rate	25	96	(79.65 - 99.9)	69	97.10	(89.92 - 99.65)
Lab tests	25	60	(38.67 - 78.87)	69	62.32	(49.83 - 73.71)
Urine protein	25	60	(38.67 - 78.87)	69	62.32	(49.83 - 73.71)
All appropriate medications administered	25	52	(31.31 - 72.2)	69	59.42	(46.92 - 71.09)
Magnesium sulfate	25	52	(31.31 - 72.2)	69	62.32	(49.83 - 73.71)
Hydralazine / labetalol / nifedipine (if diastolic blood pressure > 110 at first checkup)	4	100	(39.76 - 100)	10	70.00	(34.75 - 93.33)
Referred to complete facility	25	28	(12.07 - 49.39)	69	26.09	(16.25 - 38.06)
Pre-eclampsia managed according to SMI standard	25	12	(2.55 - 31.22)	69	17.39	(9.32 - 28.41)

Table 7.13: Maternal pre-eclampsia management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	39	69.23	(52.43 - 82.98)	47	51.06	(36.06 - 65.92)
Pulse / heart rate	39	100.00	(90.97 - 100)	47	100.00	(92.45 - 100)
Blood pressure	39	100.00	(90.97 - 100)	47	100.00	(92.45 - 100)
Respiratory rate	39	100.00	(90.97 - 100)	47	97.87	(88.71 - 99.95)
Patellar reflex	39	69.23	(52.43 - 82.98)	47	53.19	(38.08 - 67.89)
Lab tests	39	15.38	(5.86 - 30.53)	47	14.89	(6.2 - 28.31)
Urine protein	39	82.05	(66.47 - 92.46)	47	74.47	(59.65 - 86.06)
Platelet count	39	89.74	(75.78 - 97.13)	47	91.49	(79.62 - 97.63)
Creatinine	39	66.67	(49.78 - 80.91)	47	76.60	(61.97 - 87.7)
Uric acid	39	43.59	(27.81 - 60.38)	47	44.68	(30.17 - 59.88)
Aspartate aminotransferase / glutamic-oxalacetic transaminase	39	79.49	(63.54 - 90.7)	47	68.09	(52.88 - 80.91)
Alanine transaminase / glutamic-pyruvic transaminase	39	76.92	(60.67 - 88.87)	47	68.09	(52.88 - 80.91)
Lactate dehydrogenase	39	30.77	(17.02 - 47.57)	47	46.81	(32.11 - 61.92)
All appropriate medications administered	39	87.18	(72.57 - 95.7)	47	57.45	(42.18 - 71.74)
Magnesium sulfate	39	87.18	(72.57 - 95.7)	47	57.45	(42.18 - 71.74)
Hydralazine / labetalol / nifedipine (if diastolic blood pressure > 110 at first checkup)	14	100.00	(76.84 - 100)	6	100.00	(54.07 - 100)
Pre-eclampsia managed according to SMI standard	39	12.82	(4.3 - 27.43)	47	0.00	(0 - 7.55)

7.5.4 Eclampsia

During the medical record review, doctors and nurses systematically evaluated records which met the criteria for 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
 - Pulse / heart rate
 - Respiratory rate
 - Patellar reflex (*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
- Hydralazine / labetalol / nifedipine (if diastolic blood pressure > 110 at first checkup)

4. Woman was referred to a complete facility (*basic facility only*)

Table 7.14 and Table 7.15 display hemorrhage management as indicated in obstetric medical records.

Table 7.14: Maternal eclampsia management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	2	100	(15.81 - 100)	6	100.00	(54.07 - 100)
Pulse / heart rate	2	100	(15.81 - 100)	6	100.00	(54.07 - 100)
Blood pressure	2	100	(15.81 - 100)	6	100.00	(54.07 - 100)
Respiratory rate	2	100	(15.81 - 100)	6	100.00	(54.07 - 100)
Lab tests	2	0	(0 - 84.19)	6	50.00	(11.81 - 88.19)
Urine protein	2	0	(0 - 84.19)	6	50.00	(11.81 - 88.19)
All appropriate medications administered	2	100	(15.81 - 100)	6	66.67	(22.28 - 95.67)
Magnesium sulfate	2	100	(15.81 - 100)	6	66.67	(22.28 - 95.67)
Hydralazine / labetalol / nifedipine (if diastolic blood pressure > 110 at first checkup)	1	100	(2.5 - 100)	2	100.00	(15.81 - 100)
Referred to complete facility	2	0	(0 - 84.19)	6	66.67	(22.28 - 95.67)
Eclampsia managed according to SMI standard	2	0	(0 - 84.19)	6	33.33	(4.33 - 77.72)

Table 7.15: Maternal eclampsia management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	5	20	(0.51 - 71.64)	5	40	(5.27 - 85.34)
Pulse / heart rate	5	100	(47.82 - 100)	5	100	(47.82 - 100)
Blood pressure	5	100	(47.82 - 100)	5	100	(47.82 - 100)
Respiratory rate	5	100	(47.82 - 100)	5	100	(47.82 - 100)
Patellar reflex	5	20	(0.51 - 71.64)	5	40	(5.27 - 85.34)
Lab tests	5	20	(0.51 - 71.64)	5	0	(0 - 52.18)
Urine protein	5	60	(14.66 - 94.73)	5	60	(14.66 - 94.73)
Platelet count	5	60	(14.66 - 94.73)	5	100	(47.82 - 100)
Creatinine	5	80	(28.36 - 99.49)	5	100	(47.82 - 100)
Uric acid	5	60	(14.66 - 94.73)	5	60	(14.66 - 94.73)
Aspartate aminotransferase / glutamic-oxalacetic transaminase	5	80	(28.36 - 99.49)	5	60	(14.66 - 94.73)
Alanine transaminase / glutamic-pyruvic transaminase	5	80	(28.36 - 99.49)	5	60	(14.66 - 94.73)
Lactate dehydrogenase	5	60	(14.66 - 94.73)	5	100	(47.82 - 100)
All appropriate medications administered	5	80	(28.36 - 99.49)	5	100	(47.82 - 100)
Magnesium sulfate	5	80	(28.36 - 99.49)	5	100	(47.82 - 100)
Hydralazine / labetalol / nifedipine (if diastolic blood pressure > 110 at first checkup)	3	100	(29.24 - 100)	3	100	(29.24 - 100)
Eclampsia managed according to SMI standard	5	0	(0 - 52.18)	5	0	(0 - 52.18)

7.5.5 Maternal complications indicator performance

The tables below display the percentage of medical records reviewed for maternal complications that indicated appropriate treatment and management according to the SMI standard.

Table 7.16: Maternal complications management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Sepsis managed according to SMI standard	17	76.47	(50.1 - 93.19)	34	82.35	(65.47 - 93.24)
Hemorrhage managed according to SMI standard	54	75.93	(62.36 - 86.51)	114	70.18	(60.89 - 78.38)
Pre-eclampsia managed according to SMI standard	25	12.00	(2.55 - 31.22)	69	17.39	(9.32 - 28.41)
Eclampsia managed according to SMI standard	2	0.00	(0 - 84.19)	6	33.33	(4.33 - 77.72)
Complications managed according to SMI standard	97	58.76	(48.31 - 68.67)	222	54.95	(48.16 - 61.62)

Table 7.17: Maternal complications management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Sepsis managed according to SMI standard	10	50.00	(18.71 - 81.29)	8	37.50	(8.52 - 75.51)
Hemorrhage managed according to SMI standard	45	17.78	(8 - 32.05)	19	52.63	(28.86 - 75.55)
Pre-eclampsia managed according to SMI standard	39	12.82	(4.3 - 27.43)	47	0.00	(0 - 7.55)
Eclampsia managed according to SMI standard	5	0.00	(0 - 52.18)	5	0.00	(0 - 52.18)
Complications managed according to SMI standard	99	18.18	(11.15 - 27.2)	79	16.46	(9.06 - 26.49)

7.6 Management of neonatal complications in previous two years (sepsis, asphyxia, low birth weight, prematurity)

7.6.1 Sepsis (neonatal)

During the medical record review, doctors and nurses systematically evaluated records which met the criteria for 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 neonate must have the following vital signs checked:
 - Pulse / heart rate
 - Respiratory rate
 - Temperature
 - Abdominal exam
2. The neonate must have received the following laboratory tests (*complete facilities only*):
 - Oxygen saturation
 - Complete blood test (or hemoglobin + hematocrit + platelets + leukocyte)
 - Neutrophil band ratio / absolute count
 - C-reactive protein
 - Blood culture
3. The neonate must be administered antibiotics
4. The neonate must be evaluated by a doctor (basic) or specialist (complete)
5. Referral to complete facility (if neonate had septic shock) (*basic facilities only*)

Table 7.18 and Table 7.19 display sepsis management as indicated in neonatal medical records.

Table 7.18: Neonatal sepsis management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	71	73.24	(61.41 - 83.06)	173	69.94	(62.52 - 76.67)
Pulse / heart rate	71	94.37	(86.2 - 98.44)	173	98.27	(95.02 - 99.64)
Respiratory rate	71	94.37	(86.2 - 98.44)	173	96.53	(92.6 - 98.72)
Temperature	71	92.96	(84.33 - 97.67)	173	95.38	(91.09 - 97.98)
Abdominal exam	71	74.65	(62.92 - 84.23)	173	73.99	(66.78 - 80.35)
Antibiotics administered	71	91.55	(82.51 - 96.84)	173	91.33	(86.1 - 95.07)
Evaluated by doctor (basic) or specialist (complete)	71	85.92	(75.62 - 93.03)	173	90.17	(84.73 - 94.17)
Referred to complete facility (if septic shock)	1	100.00	(2.5 - 100)	-	-	-
Sepsis managed according to SMI standard	71	63.38	(51.1 - 74.5)	173	65.32	(57.72 - 72.38)

Table 7.19: Neonatal sepsis management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	44	61.36	(45.5 - 75.64)	26	50.00	(29.93 - 70.07)
Pulse / heart rate	44	100.00	(91.96 - 100)	26	100.00	(86.77 - 100)
Respiratory rate	44	100.00	(91.96 - 100)	26	100.00	(86.77 - 100)
Temperature	44	97.73	(87.98 - 99.94)	26	100.00	(86.77 - 100)
Abdominal exam	44	63.64	(47.77 - 77.59)	26	50.00	(29.93 - 70.07)
Lab tests	44	0.00	(0 - 8.04)	26	0.00	(0 - 13.23)
Complete blood test	44	56.82	(41.03 - 71.65)	26	69.23	(48.21 - 85.67)
Oxygen saturation	44	43.18	(28.35 - 58.97)	26	0.00	(0 - 13.23)
C-reactive protein	44	75.00	(59.66 - 86.81)	26	65.38	(44.33 - 82.79)
Neutrophil band ratio / absolute ratio	44	25.00	(13.19 - 40.34)	26	3.85	(0.1 - 19.64)
Antibiotics administered	44	88.64	(75.44 - 96.21)	26	92.31	(74.87 - 99.05)
Evaluated by doctor (basic) or specialist (complete)	44	88.64	(75.44 - 96.21)	26	76.92	(56.35 - 91.03)
Sepsis managed according to SMI standard	44	0.00	(0 - 8.04)	26	0.00	(0 - 13.23)

7.6.2 Asphyxia

During the medical record review, doctors and nurses systematically evaluated records 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 neonate must have the following vital signs checked:
 - Pulse/ heart rate
 - Respiratory rate
 - APGAR score at one minute

- APGAR score at five minutes
2. The neonate must have received the following lab tests:
- Glycaemia
 - Oxygen saturation (if APGAR \leq 3 at five minutes)
3. The neonate must have received the following procedures:
- Heat application
 - Evaluated by doctor (if basic facility) or specialist (if complete facility)
 - AMBU / positive pressure ventilation / endotracheal intubation / chest compressions (if APGAR \leq 3 at five minutes)
 - Referral to complete facility (if APGAR \leq 3 at five minutes) (*basic facilities only*)

Table 7.20 and Table 7.21 display asphyxia management as indicated in neonatal medical records.

Table 7.20: Neonatal asphyxia management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	11	63.64	(30.79 - 89.07)	30	93.33	(77.93 - 99.18)
Pulse / heart rate	11	81.82	(48.22 - 97.72)	30	96.67	(82.78 - 99.92)
Respiratory rate	11	63.64	(30.79 - 89.07)	30	93.33	(77.93 - 99.18)
APGAR score at one minute	11	72.73	(39.03 - 93.98)	30	96.67	(82.78 - 99.92)
APGAR score at five minutes	11	72.73	(39.03 - 93.98)	30	96.67	(82.78 - 99.92)
Laboratory tests	11	27.27	(6.02 - 60.97)	30	40.00	(22.66 - 59.4)
Glycaemia	11	27.27	(6.02 - 60.97)	30	40.00	(22.66 - 59.4)
Oxygen saturation (if APGAR \leq 3 at five minutes)	1	0.00	(0 - 97.5)	1	0.00	(0 - 97.5)
Heat application	11	36.36	(10.93 - 69.21)	30	60.00	(40.6 - 77.34)
Evaluated by doctor (if basic) or specialist (if complete)	11	72.73	(39.03 - 93.98)	30	86.67	(69.28 - 96.24)
Referred to complete facility (if APGAR \leq 3 at five minutes)	1	100.00	(2.5 - 100)	1	100.00	(2.5 - 100)
AMBU / endotracheal intubation / cardiac massage (if APGAR \leq 3 at five minutes)	1	100.00	(2.5 - 100)	1	100.00	(2.5 - 100)
Asphyxia managed according to SMI standard	11	18.18	(2.28 - 51.78)	30	20.00	(7.71 - 38.57)

Table 7.21: Neonatal asphyxia management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	24	95.83	(78.88 - 99.89)	10	100	(69.15 - 100)
Pulse / heart rate	24	100.00	(85.75 - 100)	10	100	(69.15 - 100)
Respiratory rate	24	100.00	(85.75 - 100)	10	100	(69.15 - 100)
APGAR score at one minute	24	95.83	(78.88 - 99.89)	10	100	(69.15 - 100)
APGAR score at five minutes	24	95.83	(78.88 - 99.89)	10	100	(69.15 - 100)
Laboratory tests	24	87.50	(67.64 - 97.34)	10	60	(26.24 - 87.84)
Glycaemia	24	87.50	(67.64 - 97.34)	10	60	(26.24 - 87.84)
Oxygen saturation (if APGAR ≤ 3 at five minutes)	-	-	-	-	-	-
Heat application	24	70.83	(48.91 - 87.38)	10	80	(44.39 - 97.48)
Evaluated by doctor (if basic) or specialist (if complete)	24	100.00	(85.75 - 100)	10	100	(69.15 - 100)
Referred to complete facility (if APGAR ≤ 3 at five minutes)	-	-	-	-	-	-
Asphyxia managed according to SMI standard	24	62.50	(40.59 - 81.2)	10	60	(26.24 - 87.84)

7.6.3 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 neonate must have the following vital signs checked:
 - Weight
 - Pulse / heart rate
 - Respiratory rate
 - Head circumference
 - Silverman-Anderson / Downes test
 - APGAR score (one or five minutes) / skin color
2. The neonate must have the following laboratory tests performed: *Glycaemia
3. The neonate must have received the following:
 - Gestational age calculated using Capurro/Ballard method (if neonate was born in the facility)
 - Classification according to weight (if neonate was born in the facility)
 - Heat application
 - Breastfed / given glucose
 - Evaluated by doctor
 - Referred to complete facility (if weight < 1500 grams at basic facility)

4. The neonate must have received the appropriate management for any complications due to low birth weight (pneumonia, diarrhea, seizures, and hypoglycemia)

Table 7.22 and Table 7.23 display low birth weight management as indicated in neonatal medical records.

Table 7.22: Neonatal low birth weight management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	23	65.22	(42.73 - 83.62)	25	60	(38.67 - 78.87)
Weight	23	95.65	(78.05 - 99.89)	25	96	(79.65 - 99.9)
Pulse / heart rate	23	95.65	(78.05 - 99.89)	25	96	(79.65 - 99.9)
Respiratory rate	23	95.65	(78.05 - 99.89)	25	96	(79.65 - 99.9)
Head circumference	23	78.26	(56.3 - 92.54)	25	88	(68.78 - 97.45)
Silverman-Anderson / Downes test	23	65.22	(42.73 - 83.62)	25	64	(42.52 - 82.03)
APGAR score / skin test	23	91.30	(71.96 - 98.93)	25	100	(86.28 - 100)
Glycaemia lab test	23	30.43	(13.21 - 52.92)	25	28	(12.07 - 49.39)
Gestational age calculated using Capurro/Ballard	23	86.96	(66.41 - 97.22)	25	80	(59.3 - 93.17)
Weight classification (if in-facility)	23	100.00	(85.18 - 100)	25	100	(86.28 - 100)
Heat application	23	86.96	(66.41 - 97.22)	25	44	(24.4 - 65.07)
Breastfed / given glucose	23	95.65	(78.05 - 99.89)	25	96	(79.65 - 99.9)
Evaluated by doctor	23	86.96	(66.41 - 97.22)	25	72	(50.61 - 87.93)
Referred to complete facility (if weight < 1500 grams at basic facility)	-	-	-	5	60	(14.66 - 94.73)
Appropriate management of any associated complications	-	-	-	2	100	(15.81 - 100)
Low birth weight managed according to SMI standard	23	21.74	(7.46 - 43.7)	25	12	(2.55 - 31.22)

Table 7.23: Neonatal low birth weight management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	16	87.50	(61.65 - 98.45)	20	40	(19.12 - 63.95)
Weight	16	93.75	(69.77 - 99.84)	20	100	(83.16 - 100)
Pulse / heart rate	16	100.00	(79.41 - 100)	20	100	(83.16 - 100)
Respiratory rate	16	100.00	(79.41 - 100)	20	100	(83.16 - 100)
Head circumference	16	93.75	(69.77 - 99.84)	20	100	(83.16 - 100)
Silverman-Anderson / Downes test	16	93.75	(69.77 - 99.84)	20	40	(19.12 - 63.95)
APGAR score / skin test	16	100.00	(79.41 - 100)	20	100	(83.16 - 100)
Glycaemia lab test	16	68.75	(41.34 - 88.98)	20	65	(40.78 - 84.61)
Gestational age calculated using Capurro/Ballard	16	100.00	(79.41 - 100)	18	100	(81.47 - 100)
Weight classification (if in-facility)	16	100.00	(79.41 - 100)	18	100	(81.47 - 100)
Heat application	16	87.50	(61.65 - 98.45)	20	80	(56.34 - 94.27)
Breastfed / given glucose	16	93.75	(69.77 - 99.84)	20	95	(75.13 - 99.87)
Evaluated by doctor	16	93.75	(69.77 - 99.84)	20	100	(83.16 - 100)
Appropriate management of any associated complications	-	-	-	-	-	-
Low birth weight managed according to SMI standard	16	50.00	(24.65 - 75.35)	20	25	(8.66 - 49.1)

7.6.4 Prematurity

During the medical record review, doctors and nurses systematically evaluated records 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 neonate must have the following vital signs checked:
 - Weight
 - Pulse / heart rate
 - Respiratory rate
 - Head circumference
 - Silverman-Anderson / Downes test
 - APGAR score (one or five minutes) / skin color
2. The neonate must have the following laboratory tests performed: *Glycaemia
3. The neonate must have received the following:
 - Gestational age calculated using Capurro/Ballard method (if neonate was born in the facility)
 - Classification according to weight (if neonate was born in the facility)
 - Heat application
 - Breastfed / given glucose
 - Evaluated by doctor
 - Referred to complete facility (if weight < 1500 grams at basic facility)
4. The neonate must have received the appropriate management for any complications due to prematurity (pneumonia, diarrhea, seizures, and hypoglycemia)

Table 7.24, Table 7.25, and Table 7.26 display prematurity management as indicated in neonatal medical records.

Table 7.24: Neonatal prematurity management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	1	100	(2.5 - 100)	5	60	(14.66 - 94.73)
Weight	1	100	(2.5 - 100)	5	100	(47.82 - 100)
Pulse / heart rate	1	100	(2.5 - 100)	5	100	(47.82 - 100)
Respiratory rate	1	100	(2.5 - 100)	5	100	(47.82 - 100)
Head circumference	1	100	(2.5 - 100)	5	100	(47.82 - 100)
Silverman-Anderson / Downes test	1	100	(2.5 - 100)	5	60	(14.66 - 94.73)
APGAR score / skin test	1	100	(2.5 - 100)	5	100	(47.82 - 100)
Glycaemia lab test	1	100	(2.5 - 100)	5	20	(0.51 - 71.64)
Gestational age calculated using Capurro/Ballard	1	100	(2.5 - 100)	5	100	(47.82 - 100)
Weight classification (if in-facility)	1	100	(2.5 - 100)	5	100	(47.82 - 100)
Heat application	1	100	(2.5 - 100)	5	40	(5.27 - 85.34)
Breastfed / given glucose	1	100	(2.5 - 100)	5	80	(28.36 - 99.49)
Evaluated by doctor	1	100	(2.5 - 100)	5	80	(28.36 - 99.49)
Referred to complete facility (if weight < 1500 grams at basic facility)	-	-	-	2	100	(15.81 - 100)
Appropriate management of any associated complications	-	-	-	-	-	-
Prematurity managed according to SMI standard	1	100	(2.5 - 100)	5	0	(0 - 52.18)

Table 7.25: Neonatal complications management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Sepsis managed according to SMI standard	71	63.38	(51.1 - 74.5)	173	65.32	(57.72 - 72.38)
Asphyxia managed according to SMI standard	11	18.18	(2.28 - 51.78)	30	20.00	(7.71 - 38.57)
Low birth weight managed according to SMI standard	23	21.74	(7.46 - 43.7)	25	12.00	(2.55 - 31.22)
Prematurity managed according to SMI standard	1	100.00	(2.5 - 100)	5	0.00	(0 - 52.18)
Complications managed according to SMI standard	106	50.00	(40.13 - 59.87)	228	52.63	(45.93 - 59.26)

Table 7.26: Neonatal complications management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Sepsis managed according to SMI standard	44	0.00	(0 - 8.04)	26	0	(0 - 13.23)
Asphyxia managed according to SMI standard	24	62.50	(40.59 - 81.2)	10	60	(26.24 - 87.84)
Low birth weight managed according to SMI standard	16	50.00	(24.65 - 75.35)	20	25	(8.66 - 49.1)
Prematurity managed according to SMI standard	-	-	-	-	-	-
Complications managed according to SMI standard	84	27.38	(18.21 - 38.2)	55	20	(10.43 - 32.97)

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			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Incinerator at facility	32	46.9	(29.1 - 65.3)	45	60.0	(44.3 - 74.3)	37	54.1	(36.9 - 70.5)
Contract with other facility for disposal (if no incinerator)	17	11.8	(1.5 - 36.4)	18	22.2	(6.4 - 47.6)	17	41.2	(18.4 - 67.1)
Manual for decontamination	32	18.8	(7.2 - 36.4)	45	86.7	(73.2 - 94.9)	37	48.6	(31.9 - 65.6)

* Infection control data missing from one facility at first follow-up.

Table 8.2: Infection control and disposal, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Incinerator at facility	5	80	(28.4 - 99.5)	11	90.9	(58.7 - 99.8)	20	95	(75.1 - 99.9)
Contract with other facility for disposal (if no incinerator)	1	0	(0 - 97.5)	1	100.0	(2.5 - 100)	1	100	(2.5 - 100)
Manual for decontamination	5	100	(47.8 - 100)	11	100.0	(71.5 - 100)	20	80	(56.3 - 94.3)

Table 8.3: Infection control and disposal, complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Incinerator at facility	3	66.7	(9.4 - 99.2)	3	66.7	(9.4 - 99.2)	3	100.0	(29.2 - 100)
Contract with other facility for disposal (if no incinerator)	1	0.0	(0 - 97.5)	1	100.0	(2.5 - 100)	-	-	-
Manual for decontamination	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	3	66.7	(9.4 - 99.2)

Appendix A: Intervention Matrices

Table A.1: Intervention performance matrix

Code	Description	Baseline			First Follow-Up			Second Follow-Up		
		N	%	CI	N	%	CI	N	%	CI
3040	First ANC visit within 12 weeks	106	39.6	(30.3 - 49.6)	371	29.9	(25.3 - 34.9)	389	51.7	(46.6 - 56.7)
4070	Neonatal complications management	190	40.0	(33 - 47.3)	-	-	-	283	46.3	(40.4 - 52.3)
4080	Maternal complications management	196	38.3	(31.4 - 45.5)	-	-	-	301	44.9	(39.1 - 50.7)
4103	Immediate postpartum neonatal care	69	7.2	(2.4 - 16.1)	184	67.9	(60.7 - 74.6)	279	43.7	(37.8 - 49.8)
FP	Postpartum contraception	46	43.5	(28.9 - 58.9)	79	79.7	(69.2 - 88)	118	85.6	(77.9 - 91.4)
Agree	Social agreements	-	-	-	-	-	-	40	77.5	(61.5 - 89.2)

¹ 3040: The baseline value was previously reported at 37.3%. To ensure comparability across rounds, the baseline estimate was recalculated to 39.6%. 1st and 2nd follow-up use reported gestational age while baseline uses calculated gestational age.

² 4070 & 4080: Data from medical records from the baseline timeframe of complications were recollected during the 36-month evaluation. Indicator values and definitions have been updated accordingly.

³ Social Agreements: This indicator was not captured at the baseline & 1st follow-up evaluations.

⁴ FP: When the indicator definition is constrained to only progesterone injectables, the FP indicator value drops to 39.0% at second follow-up. The baseline value was previously reported at 47.3%. To ensure comparability across rounds, the baseline estimate was recalculated to 43.5%.

Table A.2: Intervention monitoring matrix

Code	Description	Baseline			First Follow-Up			Second Follow-Up		
		N	%	CI	N	%	CI	N	%	CI
3030	4+ ANC visits according to the norm	135	38.5	(30.3 - 47.3)	482	20.1	(16.6 - 24)	490	11.2	(8.6 - 14.4)
4050	Immediate postpartum maternal care	-	-	-	166	45.2	(37.5 - 53.1)	267	73.8	(68.1 - 79)
4065	Partograph revision	-	-	-	221	92.8	(88.5 - 95.8)	316	90.8	(87.1 - 93.8)
4095	Active management of third stage of labor	90	83.3	(74 - 90.4)	210	64.8	(57.9 - 71.2)	316	86.4	(82.1 - 90)
7000	Cold chain composite	28	28.6	(13.2 - 48.7)	27	88.9	(70.8 - 97.6)	41	78.0	(62.4 - 89.4)
7010	Childcare services composite	37	10.8	(3 - 25.4)	53	73.6	(59.7 - 84.7)	56	57.1	(43.2 - 70.3)
7020	Pre/postnatal care composite	37	27.0	(13.8 - 44.1)	56	78.6	(65.6 - 88.4)	57	68.4	(54.8 - 80.1)
7030	Emergency care composite	5	40.0	(5.3 - 85.3)	11	90.9	(58.7 - 99.8)	19	68.4	(43.4 - 87.4)
7050	Family planning composite	37	59.5	(42.1 - 75.2)	56	87.5	(75.9 - 94.8)	54	74.1	(60.3 - 85)
8870	Socio-cultural conditions	3	100.0	(29.2 - 100)	7	71.4	(29 - 96.3)	8	87.5	(47.3 - 99.7)

¹ 4050 & 4065: This indicator was not captured at the baseline evaluation.

² 7010: Vaccine three-month stock only captured for MMR and BCG at baseline and first follow-up evaluations.

³ 7030: Drug three-month stock only captured for dexamethasone, gentamicin, magnesium sulfate, and oxytocin at baseline evaluations.

⁴ 7050: IUD three-month stock not captured at baseline evaluation.

Appendix B: Comparison area tables

Table B2.1: Health facility classification

EONC	Baseline	Second Follow-Up
Ambulatory	23	19
Basic	1	8
Complete	-	3
Total	24	30

Table B2.2: Number of facilities by municipality and health department

Department	Municipality	Baseline Facilities	Second Follow-up Facilities
Chontales	El Ayote	1	2
Chontales	Juigalpa	-	1
Jinotega	Jinotega	16	11
Madriz	San Juan Río Coco	5	6
Madriz	Somoto	-	1
Madriz	Telpaneca	2	4
Nueva Segovia	Jalapa	-	1
Nueva Segovia	Ocotal	-	1
Nueva Segovia	Quilali	-	1
Zelaya Central	El Rama	-	1
Zelaya Central	Muelles de los Buetes	-	1

* At baseline, municipalities were categorized based on governmental department. At first and second follow-up, municipalities are categorized based on the Local Comprehensive Health Care System (SILAIS) regions.

Figure B2.1: Geographical representation of facilities

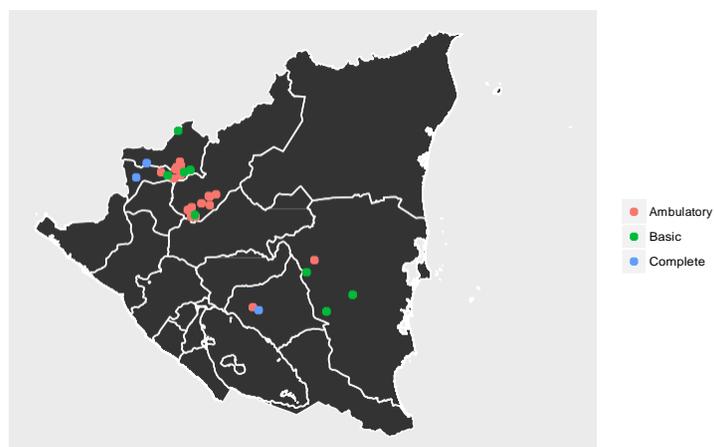


Table B2.3: Medical record extraction

Record Type	Baseline			Second Follow-Up		
	Ambulatory	Basic	Complete	Ambulatory	Basic	Complete
Antenatal care	235	12	0	182	21	0
Postpartum care	0	12	0	0	77	49
Delivery	0	12	0	0	85	46
Maternal complications	0	53	50	0	99	56
Neonatal complications	0	61	52	0	70	79
Total	235	150	102	182	352	230

Table B2.4: Referrals, ambulatory facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Receives referred patients from other facilities	23	34.8	(16.4 - 57.3)	19	21.1	(6.1 - 45.6)
Receives referred routine deliveries	-	-	-	4	0.0	(0 - 60.2)
Receives referred complicated deliveries	-	-	-	4	0.0	(0 - 60.2)
Sends patient referrals to other facilities	23	100.0	(85.2 - 100)	19	94.7	(74 - 99.9)
Sends referred routine deliveries	-	-	-	18	100.0	(81.5 - 100)
Sends referred complicated deliveries	-	-	-	18	100.0	(81.5 - 100)

Table B2.5: Referrals, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Receives referred patients from other facilities	1	100	(2.5 - 100)	8	100.0	(63.1 - 100)
Receives referred routine deliveries	-	-	-	8	87.5	(47.3 - 99.7)
Receives referred complicated deliveries	-	-	-	8	75.0	(34.9 - 96.8)
Sends patient referrals to other facilities	1	100	(2.5 - 100)	8	100.0	(63.1 - 100)
Sends referred routine deliveries	-	-	-	8	12.5	(0.3 - 52.7)
Sends referred complicated deliveries	-	-	-	8	87.5	(47.3 - 99.7)

Table B2.6: Referrals, complete facilities

	Second Follow-Up		
	N	%	CI
Receives referred patients from other facilities	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	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

	Ambulatory			Basic			Complete		
	N	%	CI	N	%	CI	N	%	CI
Routine Deliveries									
Referral sheet	-	-	-	7	100.0	(59 - 100)	3	100.0	(29.2 - 100)
Patient medical record	-	-	-	7	42.9	(9.9 - 81.6)	3	66.7	(9.4 - 99.2)
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)
Other documentation	-	-	-	7	85.7	(42.1 - 99.6)	3	33.3	(0.8 - 90.6)
Complicated Deliveries									
Referral sheet	-	-	-	6	100.0	(54.1 - 100)	3	100.0	(29.2 - 100)
Patient medical record	-	-	-	6	50.0	(11.8 - 88.2)	3	66.7	(9.4 - 99.2)
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)
Other documentation	-	-	-	6	83.3	(35.9 - 99.6)	3	66.7	(9.4 - 99.2)

Table B2.8: Personnel employed, ambulatory facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
General physician	23	26.1	(10.2 - 48.4)	19	52.6	(28.9 - 75.6)
Pediatrician	23	4.3	(0.1 - 21.9)	19	0.0	(0 - 17.6)
Nutritionist	23	0.0	(0 - 14.8)	19	0.0	(0 - 17.6)
Pharmacist	23	4.3	(0.1 - 21.9)	19	0.0	(0 - 17.6)
Nurse	23	60.9	(38.5 - 80.3)	19	52.6	(28.9 - 75.6)
Auxiliary nurse	23	65.2	(42.7 - 83.6)	19	73.7	(48.8 - 90.9)
Social worker	23	13.0	(2.8 - 33.6)	19	0.0	(0 - 17.6)
Lab technician	22	9.1	(1.1 - 29.2)	19	0.0	(0 - 17.6)
Ambulance driver	23	17.4	(5 - 38.8)	19	0.0	(0 - 17.6)
Social service doctor	-	-	-	19	63.2	(38.4 - 83.7)
Social service nurse	-	-	-	19	26.3	(9.1 - 51.2)
Community health worker	-	-	-	19	100.0	(82.4 - 100)

* Ambulance driver data missing for one facility at baseline.

Table B2.9: Personnel employed, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
General physician	1	100	(2.5 - 100)	8	100.0	(63.1 - 100)
Pediatrician	1	100	(2.5 - 100)	8	87.5	(47.3 - 99.7)
Nutritionist	1	0	(0 - 97.5)	8	12.5	(0.3 - 52.7)
Pharmacist	1	0	(0 - 97.5)	8	87.5	(47.3 - 99.7)
Nurse	1	100	(2.5 - 100)	8	100.0	(63.1 - 100)
Auxiliary nurse	1	100	(2.5 - 100)	8	100.0	(63.1 - 100)
Social worker	1	0	(0 - 97.5)	8	0.0	(0 - 36.9)
Lab technician	1	100	(2.5 - 100)	8	100.0	(63.1 - 100)
Internist	1	100	(2.5 - 100)	8	87.5	(47.3 - 99.7)
Gynecologist	1	100	(2.5 - 100)	8	87.5	(47.3 - 99.7)
Surgeon	1	100	(2.5 - 100)	8	62.5	(24.5 - 91.5)
Anesthesiologist	1	0	(0 - 97.5)	8	62.5	(24.5 - 91.5)
Emergency medical technician	1	0	(0 - 97.5)	8	0.0	(0 - 36.9)
Radiology technician	1	0	(0 - 97.5)	8	12.5	(0.3 - 52.7)
Ambulance driver	1	100	(2.5 - 100)	8	100.0	(63.1 - 100)
Social service doctor	-	-	-	8	87.5	(47.3 - 99.7)
Social service nurse	-	-	-	8	100.0	(63.1 - 100)
Community health worker	-	-	-	8	87.5	(47.3 - 99.7)
Maintenance worker	1	100	(2.5 - 100)	8	50.0	(15.7 - 84.3)

* Ambulance driver data missing for one facility at baseline.

Table B2.10: Personnel employed, complete facilities

	Second Follow-Up		
	N	%	CI
General physician	3	100.0	(29.2 - 100)
Pediatrician	3	100.0	(29.2 - 100)
Nutritionist	3	100.0	(29.2 - 100)
Pharmacist	3	100.0	(29.2 - 100)
Nurse	3	100.0	(29.2 - 100)
Auxiliary nurse	3	100.0	(29.2 - 100)
Social worker	3	66.7	(9.4 - 99.2)
Lab technician	3	100.0	(29.2 - 100)
Internist	3	100.0	(29.2 - 100)
Gynecologist	3	100.0	(29.2 - 100)
Surgeon	3	100.0	(29.2 - 100)
Anesthesiologist	3	100.0	(29.2 - 100)
Emergency medical technician	3	33.3	(0.8 - 90.6)
Radiology technician	3	100.0	(29.2 - 100)
Ambulance driver	3	100.0	(29.2 - 100)
Social service doctor	3	100.0	(29.2 - 100)
Social service nurse	3	66.7	(9.4 - 99.2)
Community health worker	3	0.0	(0 - 70.8)
Maintenance worker	3	100.0	(29.2 - 100)

* Emergency medical technician data missing for one facility at baseline.

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

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Functional electricity supply	23	95.7	(78.1 - 99.9)	19	100.0	(82.4 - 100)
Public electricity network	22	90.9	(70.8 - 98.9)	19	100.0	(82.4 - 100)
Private electricity network	22	4.5	(0.1 - 22.8)	19	0.0	(0 - 17.6)
Emergency electric plant	22	9.1	(1.1 - 29.2)	19	5.3	(0.1 - 26)
Solar generator	22	9.1	(1.1 - 29.2)	19	0.0	(0 - 17.6)
Other source	22	9.1	(1.1 - 29.2)	19	0.0	(0 - 17.6)
Functional water supply	23	69.6	(47.1 - 86.8)	19	68.4	(43.4 - 87.4)
Public water network	23	69.6	(47.1 - 86.8)	19	57.9	(33.5 - 79.7)
Public well	23	13.0	(2.8 - 33.6)	19	10.5	(1.3 - 33.1)
Protected well at facility	23	4.3	(0.1 - 21.9)	19	0.0	(0 - 17.6)
Unprotected well	23	4.3	(0.1 - 21.9)	19	0.0	(0 - 17.6)
Manual pump	23	0.0	(0 - 14.8)	19	0.0	(0 - 17.6)
Bottled water	23	4.3	(0.1 - 21.9)	19	0.0	(0 - 17.6)
Tank or pipe truck	23	0.0	(0 - 14.8)	19	5.3	(0.1 - 26)
Rain water	23	0.0	(0 - 14.8)	19	5.3	(0.1 - 26)
Other source	23	17.4	(5 - 38.8)	19	26.3	(9.1 - 51.2)

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

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Functional electricity supply	1	100	(2.5 - 100)	8	100.0	(63.1 - 100)
Public electricity network	1	100	(2.5 - 100)	8	87.5	(47.3 - 99.7)
Private electricity network	1	0	(0 - 97.5)	8	0.0	(0 - 36.9)
Emergency electric plant	1	0	(0 - 97.5)	8	25.0	(3.2 - 65.1)
Solar generator	1	0	(0 - 97.5)	8	0.0	(0 - 36.9)
Other source	1	0	(0 - 97.5)	8	0.0	(0 - 36.9)
Functional water supply	1	100	(2.5 - 100)	8	100.0	(63.1 - 100)
Public water network	1	0	(0 - 97.5)	8	75.0	(34.9 - 96.8)
Public well	1	0	(0 - 97.5)	8	0.0	(0 - 36.9)
Protected well at facility	1	0	(0 - 97.5)	8	37.5	(8.5 - 75.5)
Unprotected well	1	0	(0 - 97.5)	8	0.0	(0 - 36.9)
Manual pump	1	0	(0 - 97.5)	8	0.0	(0 - 36.9)
Bottled water	1	0	(0 - 97.5)	8	0.0	(0 - 36.9)
Tank or pipe truck	1	0	(0 - 97.5)	8	0.0	(0 - 36.9)
Rain water	1	0	(0 - 97.5)	8	0.0	(0 - 36.9)
Other source	1	100	(2.5 - 100)	8	0.0	(0 - 36.9)

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

	Second Follow-Up		
	N	%	CI
Functional electricity supply	3	100.0	(29.2 - 100)
Public electricity network	3	100.0	(29.2 - 100)
Private electricity network	3	0.0	(0 - 70.8)
Emergency electric plant	3	33.3	(0.8 - 90.6)
Solar generator	3	0.0	(0 - 70.8)
Other source	3	0.0	(0 - 70.8)
Functional water supply	3	100.0	(29.2 - 100)
Public water network	3	100.0	(29.2 - 100)
Public well	3	0.0	(0 - 70.8)
Protected well at facility	3	33.3	(0.8 - 90.6)
Unprotected well	3	0.0	(0 - 70.8)
Manual pump	3	0.0	(0 - 70.8)
Bottled water	3	0.0	(0 - 70.8)
Tank or pipe truck	3	0.0	(0 - 70.8)
Rain water	3	0.0	(0 - 70.8)
Other source	3	33.3	(0.8 - 90.6)

Table B2.14: Internet access, ambulatory facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Functional internet connection	23	4.3	(0.1 - 21.9)	19	15.8	(3.4 - 39.6)

Table B2.15: Internet access, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Functional internet connection	1	0	(0 - 97.5)	8	75	(34.9 - 96.8)

Table B2.16: Internet access, complete facilities

	Second Follow-Up		
	N	%	CI
Functional internet connection	3	100	(29.2 - 100)

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

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Provides childcare services	23	100.0	(85.2 - 100)	19	100.0	(82.4 - 100)
Vaccinates children under five	23	95.7	(78.1 - 99.9)	19	100.0	(82.4 - 100)
Child health care area						
Visual and auditory privacy	21	76.2	(52.8 - 91.8)	19	73.7	(48.8 - 90.9)
Non private area	21	23.8	(8.2 - 47.2)	19	10.5	(1.3 - 33.1)
Visual privacy only	21	0.0	(0 - 16.1)	19	10.5	(1.3 - 33.1)
Other	21	0.0	(0 - 16.1)	19	0.0	(0 - 17.6)
Do not provide service	21	0.0	(0 - 16.1)	19	5.3	(0.1 - 26)

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

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Provides childcare services	1	100	(2.5 - 100)	8	100.0	(63.1 - 100)
Vaccinates children under five	1	100	(2.5 - 100)	8	87.5	(47.3 - 99.7)
Child health care area						
Visual and auditory privacy	1	100	(2.5 - 100)	8	75.0	(34.9 - 96.8)
Non private area	1	0	(0 - 97.5)	8	12.5	(0.3 - 52.7)
Visual privacy only	1	0	(0 - 97.5)	8	0.0	(0 - 36.9)
Other	1	0	(0 - 97.5)	8	12.5	(0.3 - 52.7)
Do not provide service	1	0	(0 - 97.5)	8	0.0	(0 - 36.9)

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

	Second Follow-Up		
	N	%	CI
Provides childcare services	3	66.7	(9.4 - 99.2)
Vaccinates children under five	3	33.3	(0.8 - 90.6)
Child health care area			
Visual and auditory privacy	3	66.7	(9.4 - 99.2)
Non private area	3	33.3	(0.8 - 90.6)
Visual privacy only	3	0.0	(0 - 70.8)
Other	3	0.0	(0 - 70.8)
Do not provide service	3	0.0	(0 - 70.8)

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

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Pediatric scales	21	90.5	(69.6 - 98.8)	18	83.3	(58.6 - 96.4)
Height rod	21	95.2	(76.2 - 99.9)	18	100.0	(81.5 - 100)
Stethoscope	21	81.0	(58.1 - 94.6)	18	100.0	(81.5 - 100)
Thermometer	21	76.2	(52.8 - 91.8)	18	100.0	(81.5 - 100)
Growth / Development card	21	90.5	(69.6 - 98.8)	18	88.9	(65.3 - 98.6)
All equipment observed and functional	21	61.9	(38.4 - 81.9)	18	77.8	(52.4 - 93.6)

* Digital thermometer only captured as alternative to oral/axillary thermometers at second follow-up evaluation.

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

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Pediatric scales	1	100	(2.5 - 100)	8	100.0	(63.1 - 100)
Height rod	1	0	(0 - 97.5)	8	87.5	(47.3 - 99.7)
Stethoscope	1	100	(2.5 - 100)	8	87.5	(47.3 - 99.7)
Pediatric stethoscope	1	0	(0 - 97.5)	8	62.5	(24.5 - 91.5)
Thermometer	1	0	(0 - 97.5)	8	100.0	(63.1 - 100)
Growth / Development card	1	0	(0 - 97.5)	8	50.0	(15.7 - 84.3)
All equipment observed and functional	1	0	(0 - 97.5)	8	37.5	(8.5 - 75.5)

* Digital thermometer only captured as alternative to oral/axillary thermometers at second follow-up evaluation.

Table B3.6: Child health care pharmacy inputs, ambulatory facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Oral rehydration salts	21	95.2	(76.2 - 99.9)	18	72.2	(46.5 - 90.3)
Ferrous sulfate / zinc sulfate / zinc gluconate	21	100.0	(83.9 - 100)	18	88.9	(65.3 - 98.6)
Albendazole / mebendazole	21	100.0	(83.9 - 100)	18	94.4	(72.7 - 99.9)
All drugs observed on day of observation	21	95.2	(76.2 - 99.9)	18	66.7	(41 - 86.7)
All drugs continuously available in past three months	21	85.7	(63.7 - 97)	18	55.6	(30.8 - 78.5)

* Ferrous sulfate three-month stock not captured at baseline.

Table B3.7: Child health care pharmacy inputs, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Oral rehydration salts	1	100	(2.5 - 100)	8	87.5	(47.3 - 99.7)
Ferrous sulfate / zinc sulfate / zinc gluconate	1	100	(2.5 - 100)	8	100.0	(63.1 - 100)
Albendazole / mebendazole	1	100	(2.5 - 100)	8	100.0	(63.1 - 100)
Erythromycin / amoxicillin / penicillin benzathine	1	100	(2.5 - 100)	8	100.0	(63.1 - 100)
All drugs observed on day of observation	1	100	(2.5 - 100)	8	87.5	(47.3 - 99.7)
All drugs continuously available in past three months	1	100	(2.5 - 100)	8	62.5	(24.5 - 91.5)

* Ferrous sulfate three-month stock not captured at baseline.

Table B3.8: Child health care vaccines, ambulatory facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Pentavalent / (DPT + Hep B + HiB)	16	100.0	(79.4 - 100)	12	91.7	(61.5 - 99.8)
Polio	16	87.5	(61.7 - 98.4)	12	100.0	(73.5 - 100)
Measles, Mumps, Rubella	16	93.8	(69.8 - 99.8)	12	100.0	(73.5 - 100)
Rotavirus	16	100.0	(79.4 - 100)	12	91.7	(61.5 - 99.8)
Pneumococcal conjugate	16	81.2	(54.4 - 96)	12	91.7	(61.5 - 99.8)
BCG	16	43.8	(19.8 - 70.1)	12	91.7	(61.5 - 99.8)
All vaccines observed on day of survey	17	35.3	(14.2 - 61.7)	12	75.0	(42.8 - 94.5)
All vaccines continuously available in past three months	17	35.3	(14.2 - 61.7)	12	66.7	(34.9 - 90.1)

* Vaccine three-month stock only captured for MMR and BCG at baseline and first follow-up.

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

Table B3.9: Child health care vaccines, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Pentavalent / (DPT + Hep B + HiB)	1	100	(2.5 - 100)	7	100.0	(59 - 100)
Polio	1	100	(2.5 - 100)	7	100.0	(59 - 100)
Measles, Mumps, Rubella	1	100	(2.5 - 100)	7	100.0	(59 - 100)
Rotavirus	1	100	(2.5 - 100)	7	100.0	(59 - 100)
Pneumococcal conjugate	1	0	(0 - 97.5)	7	85.7	(42.1 - 99.6)
BCG	1	0	(0 - 97.5)	7	85.7	(42.1 - 99.6)
All vaccines observed on day of survey	1	0	(0 - 97.5)	7	71.4	(29 - 96.3)
All vaccines continuously available in past three months	1	0	(0 - 97.5)	7	71.4	(29 - 96.3)

* Vaccine three-month stock only captured for MMR and BCG at baseline and first follow-up.

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

Table B3.10: Child health care composite indicator, ambulatory facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
All equipment observed and functional	21	61.9	(38.4 - 81.9)	18	77.8	(52.4 - 93.6)
All pharmacy inputs continuously available in past three months	21	85.7	(63.7 - 97)	18	55.6	(30.8 - 78.5)
All vaccines continuously available in past three months	17	35.3	(14.2 - 61.7)	12	66.7	(34.9 - 90.1)
Child health care provision according to standard	21	28.6	(11.3 - 52.2)	18	38.9	(17.3 - 64.3)

* Ferrous sulfate stock not captured at baseline.

* Ferrous sulfate three-month stock not captured at baseline.

† Vaccine three-month stock only captured for MMR and BCG at baseline and first follow-up.

‡ Digital thermometer only captured as alternative to oral/axillary thermometers at second follow-up evaluation.

§ Kardex data and three month-stock data not captured for all drugs at baseline evaluation.

Table B3.11: Child health care composite indicator, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
All equipment observed and functional	1	0	(0 - 97.5)	8	37.5	(8.5 - 75.5)
All pharmacy inputs continuously available in past three months	1	100	(2.5 - 100)	8	62.5	(24.5 - 91.5)
All vaccines continuously available in past three months	1	0	(0 - 97.5)	7	71.4	(29 - 96.3)
Child health care provision according to standard	1	0	(0 - 97.5)	8	12.5	(0.3 - 52.7)

* Ferrous sulfate stock not captured at baseline.

* Ferrous sulfate three-month stock not captured at baseline.

† Vaccine three-month stock only captured for MMR and BCG at baseline and first follow-up.

‡ Digital thermometer only captured as alternative to oral/axillary thermometers at second follow-up evaluation.

§ Kardex data and three month-stock data not captured for all drugs at baseline evaluation.

Table B4.1: Immunization services provision, ambulatory facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vaccinates children under five	23	95.7	(78.1 - 99.9)	19	100.0	(82.4 - 100)
Immunization area						
Visual and auditory privacy	20	20.0	(5.7 - 43.7)	19	57.9	(33.5 - 79.7)
Non private area	20	75.0	(50.9 - 91.3)	19	31.6	(12.6 - 56.6)
Visual privacy only	20	0.0	(0 - 16.8)	19	10.5	(1.3 - 33.1)
Other	20	0.0	(0 - 16.8)	19	0.0	(0 - 17.6)
Do not provide service	20	5.0	(0.1 - 24.9)	19	0.0	(0 - 17.6)

Table B4.2: Immunization services provision, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vaccinates children under five	1	100	(2.5 - 100)	8	87.5	(47.3 - 99.7)
Immunization area						
Visual and auditory privacy	1	100	(2.5 - 100)	8	25.0	(3.2 - 65.1)
Non private area	1	0	(0 - 97.5)	8	0.0	(0 - 36.9)
Visual privacy only	1	0	(0 - 97.5)	8	12.5	(0.3 - 52.7)
Other	1	0	(0 - 97.5)	8	12.5	(0.3 - 52.7)
Do not provide service	1	0	(0 - 97.5)	8	50.0	(15.7 - 84.3)

Table B4.3: Immunization services provision, complete facilities

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

Table B4.4: Vaccine storage, ambulatory facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Stores vaccines	22	77.3	(54.6 - 92.2)	19	78.9	(54.4 - 93.9)
Collected from another health facility	22	9.1	(1.1 - 29.2)	19	15.8	(3.4 - 39.6)
Delivered when immunization services provided	22	9.1	(1.1 - 29.2)	19	5.3	(0.1 - 26)
Does not store vaccines	22	0.0	(0 - 15.4)	19	0.0	(0 - 17.6)

Table B4.5: Vaccine storage, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Stores vaccines	1	100	(2.5 - 100)	7	85.7	(42.1 - 99.6)
Collected from another health facility	1	0	(0 - 97.5)	7	14.3	(0.4 - 57.9)
Delivered when immunization services provided	1	0	(0 - 97.5)	7	0.0	(0 - 41)
Does not store vaccines	1	0	(0 - 97.5)	7	0.0	(0 - 41)

Table B4.6: Vaccine storage, complete facilities

	Second Follow-Up		
	N	%	CI
Stores vaccines	1	100	(2.5 - 100)
Collected from another health facility	1	0	(0 - 97.5)
Delivered when immunization services provided	1	0	(0 - 97.5)
Does not store vaccines	1	0	(0 - 97.5)

Table B4.7: Vaccine supply, ambulatory facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Ordering strategy						
Determines own need	17	82.4	(56.6 - 96.2)	15	93.3	(68.1 - 99.8)
Need determined elsewhere	17	11.8	(1.5 - 36.4)	15	0.0	(0 - 21.8)
Both (differ by vaccine)	17	5.9	(0.1 - 28.7)	15	6.7	(0.2 - 31.9)
Don't know	17	0.0	(0 - 19.5)	15	0.0	(0 - 21.8)
Time to receive supplies						
One day	17	100.0	(80.5 - 100)	15	93.3	(68.1 - 99.8)
2 - 7 days	17	0.0	(0 - 19.5)	15	6.7	(0.2 - 31.9)
More than one week	17	0.0	(0 - 19.5)	15	0.0	(0 - 21.8)
Reception of quantity ordered						
Always	17	82.4	(56.6 - 96.2)	15	73.3	(44.9 - 92.2)
Almost always	17	17.6	(3.8 - 43.4)	15	26.7	(7.8 - 55.1)
Almost never	17	0.0	(0 - 19.5)	15	0.0	(0 - 21.8)
Don't Know	17	0.0	(0 - 19.5)	15	0.0	(0 - 21.8)

Table B4.8: Vaccine supply, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Ordering strategy						
Determines own need	1	100	(2.5 - 100)	6	66.7	(22.3 - 95.7)
Need determined elsewhere	1	0	(0 - 97.5)	6	16.7	(0.4 - 64.1)
Both (differ by vaccine)	1	0	(0 - 97.5)	6	16.7	(0.4 - 64.1)
Don't know	1	0	(0 - 97.5)	6	0.0	(0 - 45.9)
Time to receive supplies						
One day	1	100	(2.5 - 100)	6	100.0	(54.1 - 100)
2 - 7 days	1	0	(0 - 97.5)	6	0.0	(0 - 45.9)
More than one week	1	0	(0 - 97.5)	6	0.0	(0 - 45.9)
Reception of quantity ordered						
Always	1	100	(2.5 - 100)	6	100.0	(54.1 - 100)
Almost always	1	0	(0 - 97.5)	6	0.0	(0 - 45.9)
Almost never	1	0	(0 - 97.5)	6	0.0	(0 - 45.9)
Don't Know	1	0	(0 - 97.5)	6	0.0	(0 - 45.9)

Table B4.9: Vaccine supply, complete facilities

	Second Follow-Up		
	N	%	CI
Ordering strategy			
Determines own need	1	100	(2.5 - 100)
Need determined elsewhere	1	0	(0 - 97.5)
Both (differ by vaccine)	1	0	(0 - 97.5)
Don't know	1	0	(0 - 97.5)
Time to receive supplies			
One day	1	100	(2.5 - 100)
2 - 7 days	1	0	(0 - 97.5)
More than one week	1	0	(0 - 97.5)
Reception of quantity ordered			
Always	1	100	(2.5 - 100)
Almost always	1	0	(0 - 97.5)
Almost never	1	0	(0 - 97.5)
Don't Know	1	0	(0 - 97.5)

Table B4.10: Vaccines observed day of survey, ambulatory facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Pentavalent	19	94.7	(74 - 99.9)	13	92.3	(64 - 99.8)
Polio / IPV	19	78.9	(54.4 - 93.9)	13	100.0	(75.3 - 100)
Measles, mumps, rubella	19	89.5	(66.9 - 98.7)	13	100.0	(75.3 - 100)
Rotavirus	19	94.7	(74 - 99.9)	13	92.3	(64 - 99.8)
Pneumococcal conjugate	19	68.4	(43.4 - 87.4)	13	84.6	(54.6 - 98.1)
BCG	19	36.8	(16.3 - 61.6)	13	84.6	(54.6 - 98.1)

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

Table B4.11: Vaccines observed day of survey, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Pentavalent	1	100	(2.5 - 100)	7	100.0	(59 - 100)
Polio / IPV	1	100	(2.5 - 100)	7	100.0	(59 - 100)
Measles, mumps, rubella	1	100	(2.5 - 100)	7	100.0	(59 - 100)
Rotavirus	1	100	(2.5 - 100)	7	100.0	(59 - 100)
Pneumococcal conjugate	1	0	(0 - 97.5)	7	85.7	(42.1 - 99.6)
BCG	1	0	(0 - 97.5)	7	85.7	(42.1 - 99.6)

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

Table B4.12: Vaccines observed day of survey, complete facilities

	Second Follow-Up		
	N	%	CI
Pentavalent	1	0	(0 - 97.5)
Polio / IPV	1	0	(0 - 97.5)
Measles, mumps, rubella	1	0	(0 - 97.5)
Rotavirus	1	0	(0 - 97.5)
Pneumococcal conjugate	1	0	(0 - 97.5)
BCG	1	100	(2.5 - 100)

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

Table B4.13: Cold chain composite indicator, ambulatory facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
At least one functional refrigerator	18	88.9	(65.3 - 98.6)	11	100.0	(71.5 - 100)
Temperature monitoring chart for each fridge	18	77.8	(52.4 - 93.6)	11	100.0	(71.5 - 100)
Temperature recorded twice daily during past 30 days	18	44.4	(21.5 - 69.2)	11	63.6	(30.8 - 89.1)
Cold chain according to standard	18	44.4	(21.5 - 69.2)	11	63.6	(30.8 - 89.1)

* At first and second follow-up, only weekdays and non-holidays are evaluated for temperature recording. At baseline, all 30 days are considered.

Table B4.14: Cold chain composite indicator, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
At least one functional refrigerator	1	100	(2.5 - 100)	7	100.0	(59 - 100)
Temperature monitoring chart for each fridge	1	0	(0 - 97.5)	7	85.7	(42.1 - 99.6)
Temperature recorded twice daily during past 30 days	1	0	(0 - 97.5)	7	85.7	(42.1 - 99.6)
Cold chain according to standard	1	0	(0 - 97.5)	7	85.7	(42.1 - 99.6)

* At first and second follow-up, only weekdays and non-holidays are evaluated for temperature recording. At baseline, all 30 days are considered.

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

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Offers family planning services	23	100.0	(85.2 - 100)	19	100.0	(82.4 - 100)
Family planning area						
Visual and auditory privacy	22	81.8	(59.7 - 94.8)	19	73.7	(48.8 - 90.9)
Non private area	22	18.2	(5.2 - 40.3)	19	15.8	(3.4 - 39.6)
Visual privacy only	22	0.0	(0 - 15.4)	19	10.5	(1.3 - 33.1)
Other	22	0.0	(0 - 15.4)	19	0.0	(0 - 17.6)
Do not provide service	22	0.0	(0 - 15.4)	19	0.0	(0 - 17.6)

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

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Offers family planning services	1	100	(2.5 - 100)	8	75.0	(34.9 - 96.8)
Family planning area						
Visual and auditory privacy	1	100	(2.5 - 100)	8	25.0	(3.2 - 65.1)
Non private area	1	0	(0 - 97.5)	8	37.5	(8.5 - 75.5)
Visual privacy only	1	0	(0 - 97.5)	8	0.0	(0 - 36.9)
Other	1	0	(0 - 97.5)	8	0.0	(0 - 36.9)
Do not provide service	1	0	(0 - 97.5)	8	37.5	(8.5 - 75.5)

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

	Second Follow-Up		
	N	%	CI
Offers family planning services	3	100.0	(29.2 - 100)
Family planning area			
Visual and auditory privacy	3	66.7	(9.4 - 99.2)
Non private area	3	0.0	(0 - 70.8)
Visual privacy only	3	0.0	(0 - 70.8)
Other	3	0.0	(0 - 70.8)
Do not provide service	3	33.3	(0.8 - 90.6)

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

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Male condom	22	86.4	(65.1 - 97.1)	19	100.0	(82.4 - 100)
Oral contraceptive pill	22	100.0	(84.6 - 100)	19	94.7	(74 - 99.9)
Injectable	22	100.0	(84.6 - 100)	19	89.5	(66.9 - 98.7)
All methods observed day of survey	22	86.4	(65.1 - 97.1)	19	89.5	(66.9 - 98.7)
All methods continuously available in past three months	22	68.2	(45.1 - 86.1)	19	73.7	(48.8 - 90.9)
Family planning services according to standard	22	68.2	(45.1 - 86.1)	19	73.7	(48.8 - 90.9)

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

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Male condom	1	100	(2.5 - 100)	5	100	(47.8 - 100)
Oral contraceptive pill	1	100	(2.5 - 100)	5	100	(47.8 - 100)
Injectable	1	100	(2.5 - 100)	5	100	(47.8 - 100)
Intrauterine device	1	100	(2.5 - 100)	5	100	(47.8 - 100)
All methods observed day of survey	1	100	(2.5 - 100)	5	100	(47.8 - 100)
All methods continuously available in past three months	1	100	(2.5 - 100)	5	60	(14.7 - 94.7)
Family planning services according to standard	1	100	(2.5 - 100)	5	60	(14.7 - 94.7)

* IUD three-month stock not captured at baseline.

Table B5.6: Family planning methods observed, complete facilities

	Second Follow-Up		
	N	%	CI
Male condom	2	50	(1.3 - 98.7)
Oral contraceptive pill	2	50	(1.3 - 98.7)
Injectable	2	50	(1.3 - 98.7)
Implant	2	0	(0 - 84.2)
Intrauterine device	2	50	(1.3 - 98.7)
IUD insertion equipment	2	50	(1.3 - 98.7)
Equipment for tubal ligation	2	50	(1.3 - 98.7)
Equipment for vasectomy	2	0	(0 - 84.2)
Other contraceptive	2	0	(0 - 84.2)

Table B5.7: Postpartum contraception administration, uncomplicated deliveries in past two years at basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Received appropriate contraception:	3	33.3	(0.8 - 90.6)	44	90.9	(78.3 - 97.5)
Condom	3	0.0	(0 - 70.8)	44	0.0	(0 - 8)
Injectable	3	33.3	(0.8 - 90.6)	44	90.9	(78.3 - 97.5)
Intrauterine device	3	0.0	(0 - 70.8)	42	0.0	(0 - 8.4)
Tubal ligation	3	0.0	(0 - 70.8)	42	0.0	(0 - 8.4)

Table B5.8: Postpartum contraception administration, uncomplicated deliveries in past two years at complete facilities

	Second Follow-Up		
	N	%	CI
Received appropriate contraception:	17	88.2	(63.6 - 98.5)
Condom	17	17.6	(3.8 - 43.4)
Injectable	17	64.7	(38.3 - 85.8)
Intrauterine device	15	0.0	(0 - 21.8)
Tubal ligation	15	6.7	(0.2 - 31.9)

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

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Offers antenatal care services	23	100	(85.2 - 100)	19	100.0	(82.4 - 100)
Visual and auditory privacy	22	100	(84.6 - 100)	19	84.2	(60.4 - 96.6)
Visual privacy only	22	0	(0 - 15.4)	19	10.5	(1.3 - 33.1)
Non private area	22	0	(0 - 15.4)	19	5.3	(0.1 - 26)
Other	22	0	(0 - 15.4)	19	0.0	(0 - 17.6)
Do not provide service	22	0	(0 - 15.4)	19	0.0	(0 - 17.6)

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

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Offers antenatal care services	1	100	(2.5 - 100)	8	50.0	(15.7 - 84.3)
Visual and auditory privacy	1	100	(2.5 - 100)	8	75.0	(34.9 - 96.8)
Visual privacy only	1	0	(0 - 97.5)	8	0.0	(0 - 36.9)
Non private area	1	0	(0 - 97.5)	8	12.5	(0.3 - 52.7)
Other	1	0	(0 - 97.5)	8	0.0	(0 - 36.9)
Do not provide service	1	0	(0 - 97.5)	8	12.5	(0.3 - 52.7)
Offers (non-urgent) delivery services	1	100	(2.5 - 100)	8	87.5	(47.3 - 99.7)
Visual and auditory privacy	1	100	(2.5 - 100)	8	87.5	(47.3 - 99.7)
Visual privacy only	1	0	(0 - 97.5)	8	0.0	(0 - 36.9)
Non private area	1	0	(0 - 97.5)	8	0.0	(0 - 36.9)
Other	1	0	(0 - 97.5)	8	0.0	(0 - 36.9)
Do not provide service	1	0	(0 - 97.5)	8	12.5	(0.3 - 52.7)

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

	Second Follow-Up		
	N	%	CI
Offers antenatal care services	3	66.7	(9.4 - 99.2)
Visual and auditory privacy	3	66.7	(9.4 - 99.2)
Visual privacy only	3	0.0	(0 - 70.8)
Non private area	3	33.3	(0.8 - 90.6)
Other	3	0.0	(0 - 70.8)
Do not provide service	3	0.0	(0 - 70.8)
Offers (non-urgent) delivery services	3	100.0	(29.2 - 100)
Visual and auditory privacy	3	100.0	(29.2 - 100)
Visual privacy only	3	0.0	(0 - 70.8)
Non private area	3	0.0	(0 - 70.8)
Other	3	0.0	(0 - 70.8)
Do not provide service	3	0.0	(0 - 70.8)

Table B6.4: ANC and PPC equipment observed and functional, ambulatory facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Standing scale with height rod	22	77.3	(54.6 - 92.2)	19	100.0	(82.4 - 100)
Gynecological table	22	90.9	(70.8 - 98.9)	19	94.7	(74 - 99.9)
Lamp	22	36.4	(17.2 - 59.3)	19	78.9	(54.4 - 93.9)
CLAP / measuring tape	22	90.9	(70.8 - 98.9)	19	100.0	(82.4 - 100)
Sphygmomanometer	22	77.3	(54.6 - 92.2)	19	94.7	(74 - 99.9)
Stethoscope	22	81.8	(59.7 - 94.8)	19	100.0	(82.4 - 100)
Pregnancy wheel	22	95.5	(77.2 - 99.9)	19	89.5	(66.9 - 98.7)
All ANC/PPC equipment observed and functional	22	18.2	(5.2 - 40.3)	19	68.4	(43.4 - 87.4)

Table B6.5: ANC and PPC equipment observed and functional, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Standing scale with height rod	1	0	(0 - 97.5)	7	71.4	(29 - 96.3)
Gynecological table	1	100	(2.5 - 100)	7	100.0	(59 - 100)
Lamp	1	100	(2.5 - 100)	7	100.0	(59 - 100)
CLAP / measuring tape	1	0	(0 - 97.5)	7	100.0	(59 - 100)
Sphygmomanometer	1	100	(2.5 - 100)	7	71.4	(29 - 96.3)
Stethoscope	1	100	(2.5 - 100)	7	85.7	(42.1 - 99.6)
Pregnancy wheel	1	0	(0 - 97.5)	7	71.4	(29 - 96.3)
Intrauterine device kit	1	100	(2.5 - 100)	7	85.7	(42.1 - 99.6)
All ANC/PPC equipment observed and functional	1	0	(0 - 97.5)	7	42.9	(9.9 - 81.6)

Table B6.6: ANC and PPC laboratory inputs, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Rapid HIV test	1	0	(0 - 97.5)	7	100.0	(59 - 100)
Rapid syphilis test	1	100	(2.5 - 100)	7	71.4	(29 - 96.3)
Serological mixer	-	-	-	7	71.4	(29 - 96.3)
Urine analysis	-	-	-	7	85.7	(42.1 - 99.6)
Glucose test	1	100	(2.5 - 100)	7	85.7	(42.1 - 99.6)
Blood test equipment	-	-	-	7	100.0	(59 - 100)
Microscope	-	-	-	7	100.0	(59 - 100)
Automated cell counter	1	0	(0 - 97.5)	7	100.0	(59 - 100)
All lab inputs observed	1	0	(0 - 97.5)	7	57.1	(18.4 - 90.1)

* Serological mixer, urine analysis, blood analysis equipment, and microscope not captured at baseline.

Table B6.7: ANC and PPC composite indicator, ambulatory facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
All ANC/PPC equipment observed and functional	22	18.2	(5.2 - 40.3)	19	68.4	(43.4 - 87.4)
ANC/PPC according to standard	22	18.2	(5.2 - 40.3)	19	68.4	(43.4 - 87.4)

Table B6.8: ANC and PPC composite indicator, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
All ANC/PPC equipment observed and functional	1	0	(0 - 97.5)	7	42.9	(9.9 - 81.6)
All lab inputs observed	1	0	(0 - 97.5)	7	57.1	(18.4 - 90.1)
ANC/PPC according to standard	1	0	(0 - 97.5)	7	14.3	(0.4 - 57.9)

Table B6.9: ANC timeliness, medical records from ambulatory facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
First ANC visit within 12 weeks	71	38	(26.8 - 50.3)	178	55.6	(48 - 63)

* At baseline, this indicator was calculated using records from ambulatory and basic facilities. Current value reflects only ambulatory baseline facilities for comparability.

Figure B6.1: Histogram comparison of first ANC visit across rounds

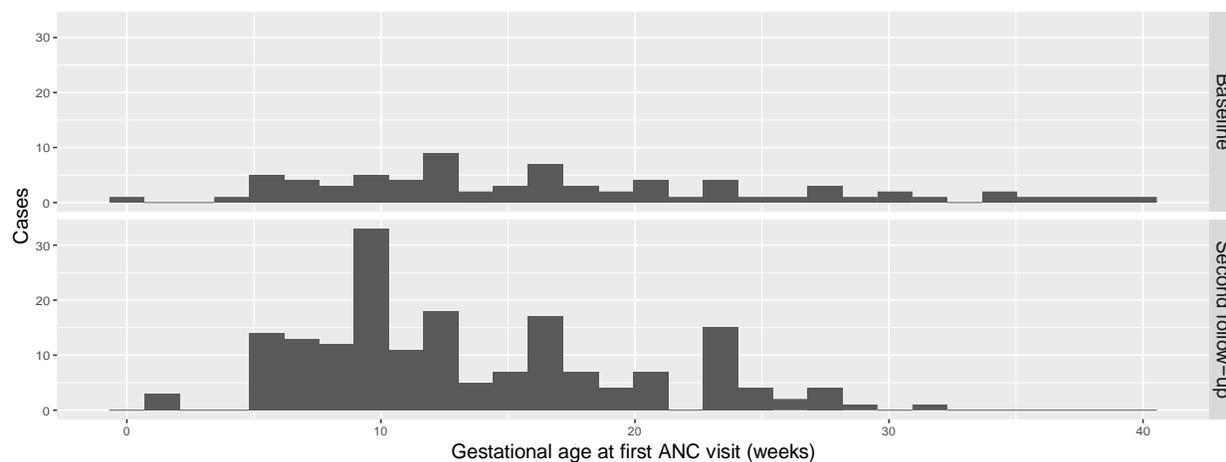


Table B6.10: At least four ANC visits to standard, medical records from ambulatory facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
At least four ANC visits	72	65.3	(53.1 - 76.1)	182	56.6	(49.1 - 63.9)
All appropriate checks performed at least four ANC visits	72	65.3	(53.1 - 76.1)	182	50.0	(42.5 - 57.5)
All lab tests performed at least once during pregnancy:	72	43.1	(31.4 - 55.3)	182	36.8	(29.8 - 44.3)
Blood group	72	86.1	(75.9 - 93.1)	182	63.2	(55.7 - 70.2)
Rh factor	72	83.3	(72.7 - 91.1)	182	63.2	(55.7 - 70.2)
Blood glucose	72	55.6	(43.4 - 67.3)	182	57.7	(50.2 - 65)
HIV test	-	-	-	182	70.9	(63.7 - 77.4)
Syphilis test (VDRL / RPR*)	72	81.9	(71.1 - 90)	182	57.1	(49.6 - 64.4)
Hemoglobin	72	72.2	(60.4 - 82.1)	182	57.7	(50.2 - 65)
Urinalysis	72	88.9	(79.3 - 95.1)	182	61.5	(54.1 - 68.6)
Antenatal care performed according to standard	72	23.6	(14.4 - 35.1)	182	20.9	(15.2 - 27.5)

* RPR not captured as alternative to VDRL at baseline or first follow-up.

† HIV test not captured at baseline.

‡ At baseline, fetal heart rate, fetal movement, and uterine height data only captured if first visit <= 20 weeks gestational age.

Table B6.11: At least four ANC visits to standard, medical records from basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
At least four ANC visits	7	14.3	(0.4 - 57.9)	21	61.9	(38.4 - 81.9)
All appropriate checks performed at least four ANC visits	7	14.3	(0.4 - 57.9)	21	47.6	(25.7 - 70.2)
All lab tests performed at least once during pregnancy:	7	0.0	(0 - 41)	21	19.0	(5.4 - 41.9)
Blood group	7	100.0	(59 - 100)	21	76.2	(52.8 - 91.8)
Rh factor	7	100.0	(59 - 100)	21	76.2	(52.8 - 91.8)
Blood glucose	7	100.0	(59 - 100)	21	52.4	(29.8 - 74.3)
HIV test	-	-	-	21	76.2	(52.8 - 91.8)
Syphilis test (VDRL / RPR*)	7	100.0	(59 - 100)	21	57.1	(34 - 78.2)
Hemoglobin	7	0.0	(0 - 41)	21	47.6	(25.7 - 70.2)
Urinalysis	7	100.0	(59 - 100)	21	57.1	(34 - 78.2)
Antenatal care performed according to standard	7	0.0	(0 - 41)	21	14.3	(3 - 36.3)

* RPR not captured as alternative to VDRL at baseline or first follow-up.

† HIV test not captured at baseline.

‡ At baseline, fetal heart rate, fetal movement, and uterine height data only captured if first visit <= 20 weeks gestational age.

Table B6.12: Active management of third stage of labor, medical records from basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Oxytocin administered	12	91.7	(61.5 - 99.8)	85	97.6	(91.8 - 99.7)
Other uterotonic administered	12	0.0	(0 - 26.5)	85	0.0	(0 - 4.2)
Active management of third stage of labor according to standard	12	91.7	(61.5 - 99.8)	85	94.1	(86.8 - 98.1)

Table B6.13: Active management of third stage of labor, medical records from complete facilities

	Second Follow-Up		
	N	%	CI
Oxytocin administered	46	97.8	(88.5 - 99.9)
Other uterotonic administered	46	0.0	(0 - 7.7)
Active management of third stage of labor according to standard	46	80.4	(66.1 - 90.6)

Table B6.14: Partograph revision, medical records from basic facilities

	Second Follow-Up		
	N	%	CI
Imminent birth or elective C-section	85	74.1	(63.5 - 83)
Partograph included and filled out	85	91.8	(83.8 - 96.6)
If partograph filled out:			
Dilation > 4.5cm	78	56.4	(44.7 - 67.6)
Fetal heart rate and alert curve recorded if dilation > 4.5cm	44	95.5	(84.5 - 99.4)
Alert curve surpassed	78	24.4	(15.3 - 35.4)
Note exists within 30 minutes if alert curve surpassed	19	94.7	(74 - 99.9)
Fetal heart rate < 120 bpm	78	1.3	(0 - 6.9)
Note exists within 30 minutes if fetal heart rate < 120 bpm	1	0.0	(0 - 97.5)
Partograph revised according to standard	85	94.1	(86.8 - 98.1)

Table B6.15: Partograph revision, medical records from complete facilities

	Second Follow-Up		
	N	%	CI
Imminent birth or elective C-section	46	91.3	(79.2 - 97.6)
Partograph included and filled out	46	73.9	(58.9 - 85.7)
If partograph filled out:			
Dilation > 4.5cm	34	50.0	(32.4 - 67.6)
Fetal heart rate and alert curve recorded if dilation > 4.5cm	17	100.0	(80.5 - 100)
Alert curve surpassed	34	0.0	(0 - 10.3)
Note exists within 30 minutes if alert curve surpassed	-	-	-
Fetal heart rate < 120 bpm	340.0		(0 - 10.3) Note
exists within 30 minutes if fetal heart rate < 120 bpm		-	-
Partograph revised according to standard	46	100.0	(92.3 - 100)

Table B6.16: Maternal immediate postpartum care, medical records from basic facilities

	Second Follow-Up		
	N	%	CI
Checked four times in first two hours:			
Blood pressure	71	93.0	(84.3 - 97.7)
Temperature	71	93.0	(84.3 - 97.7)
Heart rate / pulse	71	88.7	(79 - 95)
All checks at discharge	71	90.1	(80.7 - 95.9)
Immediate maternal PPC to standard	71	84.5	(74 - 92)

Table B6.17: Maternal immediate postpartum care, medical records from complete facilities

	Second Follow-Up		
	N	%	CI
Checked four times in first two hours:			
Blood pressure	46	100	(92.3 - 100)
Temperature	46	100	(92.3 - 100)
Heart rate / pulse	46	100	(92.3 - 100)
All checks at discharge	46	87	(73.7 - 95.1)
Immediate maternal PPC to standard	46	87	(73.7 - 95.1)

Table B6.18: Immediate neonate postpartum care, medical records from basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vitamin K	12	100.0	(73.5 - 100)	72	93.1	(84.5 - 97.7)
Application of prophylaxis with oxytetracycline ophthalmic/chloramphenicol	12	100.0	(73.5 - 100)	72	93.1	(84.5 - 97.7)
Curing the umbilical cord with water and chlorhexidine	12	100.0	(73.5 - 100)	72	62.5	(50.3 - 73.6)
Evaluation for the presence of malformations	12	100.0	(73.5 - 100)	72	84.7	(74.3 - 92.1)
BCG vaccine	12	83.3	(51.6 - 97.9)	72	83.3	(72.7 - 91.1)
APGAR score (1 or 5 minutes)	12	100.0	(73.5 - 100)	72	98.6	(92.5 - 100)
Respiratory rate	12	8.3	(0.2 - 38.5)	72	50.0	(38 - 62)
Weight	12	100.0	(73.5 - 100)	72	100.0	(95 - 100)
Height	12	100.0	(73.5 - 100)	72	97.2	(90.3 - 99.7)
Head circumference	12	83.3	(51.6 - 97.9)	72	97.2	(90.3 - 99.7)
Immediate neonate PPC to standard	12	0.0	(0 - 26.5)	72	26.4	(16.7 - 38.1)

Table B6.19: Immediate neonate postpartum care, medical records from complete facilities

	Second Follow-Up		
	N	%	CI
Vitamin K	48	85.4	(72.2 - 93.9)
Application of prophylaxis with oxytetracycline ophthalmic/chloramphenicol	48	83.3	(69.8 - 92.5)
Curing the umbilical cord with water and chlorhexidine	48	60.4	(45.3 - 74.2)
Evaluation for the presence of malformations	48	83.3	(69.8 - 92.5)
BCG vaccine	48	81.2	(67.4 - 91.1)
APGAR score (1 or 5 minutes)	48	87.5	(74.8 - 95.3)
Respiratory rate	48	54.2	(39.2 - 68.6)
Weight	48	79.2	(65 - 89.5)
Height	48	79.2	(65 - 89.5)
Head circumference	48	79.2	(65 - 89.5)
Immediate neonate PPC to standard	48	37.5	(24 - 52.6)

Table B6.20: Sociocultural adaptiveness, centros de salud

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Services adapt to sociocultural conditions	3	33.3	(0.8 - 90.6)	3	66.7	(9.4 - 99.2)

Table B7.1: Emergency care provision, second follow-up evaluation

	Basic Facilities			Complete Facilities		
	N	%	CI	N	%	CI
Emergency care room / area						
Visual and auditory privacy	7	85.7	(42.1 - 99.6)	3	100	(29.2 - 100)
Visual privacy only	7	0.0	(0 - 41)	3	0	(0 - 70.8)
Non-private area	7	14.3	(0.4 - 57.9)	3	0	(0 - 70.8)
Other	7	0.0	(0 - 41)	3	0	(0 - 70.8)
Do not provide service	7	0.0	(0 - 41)	3	0	(0 - 70.8)

* Emergency care area data not captured at baseline and first follow-up evaluations.

† Facilities which had no delivery care area were not asked about emergency care area.

Table B7.2: Emergency care composite indicator, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Dexamethasone	1	100	(2.5 - 100)	7	100.0	(59 - 100)
Antibiotics	1	100	(2.5 - 100)	7	100.0	(59 - 100)
Gentamicin	1	100	(2.5 - 100)	7	85.7	(42.1 - 99.6)
Magnesium sulfate	1	100	(2.5 - 100)	7	100.0	(59 - 100)
Hydralazine	1	100	(2.5 - 100)	7	100.0	(59 - 100)
Ergobasin / ergonovine maleate / ergometrine / oxytocin	1	100	(2.5 - 100)	7	100.0	(59 - 100)
All drugs observed day of survey	1	100	(2.5 - 100)	7	85.7	(42.1 - 99.6)
All drugs continuously available in past three months	1	100	(2.5 - 100)	7	42.9	(9.9 - 81.6)
Emergency care according to standard	1	100	(2.5 - 100)	7	42.9	(9.9 - 81.6)

* Kardex data and three month-stock data not captured for all drugs at baseline evaluation.

Table B7.3: Uterine tamponade balloon for hemorrhage management, second follow-up evaluation

	Basic Facilities			Complete Facilities		
	N	%	CI	N	%	CI
Facility uses tamponade to managed obstetric hemorrhage	8	25.0	(3.2 - 65.1)	3	100.0	(29.2 - 100)
Type						
Bakri	2	0.0	(0 - 84.2)	3	0.0	(0 - 70.8)
Foley catheter	2	50.0	(1.3 - 98.7)	3	33.3	(0.8 - 90.6)
Condom-based balloon	2	0.0	(0 - 84.2)	3	0.0	(0 - 70.8)
Do not know	2	50.0	(1.3 - 98.7)	3	66.7	(9.4 - 99.2)
Assembly kit						
Facility has tamponade kit	2	0.0	(0 - 84.2)	3	0.0	(0 - 70.8)
Kit commercially assembled	-	-	-	-	-	-
Kit prepared from available materials	-	-	-	-	-	-
Staff training						
Staff trained in tamponade use	8	37.5	(8.5 - 75.5)	3	100.0	(29.2 - 100)
Staff trained in tamponade assembly	8	25.0	(3.2 - 65.1)	3	100.0	(29.2 - 100)

Table B7.4: Distribution of obstetric complications, basic facilities

	Baseline	Second Follow-up
Sepsis	9	11
Hemorrhage	7	15
Pre-eclampsia	9	46
Eclampsia	1	2

Table B7.5: Distribution of obstetric complications, complete facilities

	Baseline	Second Follow-up
Sepsis	3	4
Hemorrhage	15	16
Pre-eclampsia	26	32
Eclampsia	3	1

Table B7.6: Distribution of neonatal complications, basic facilities

	Baseline	Second Follow-up
Sepsis	27	31
Low birth weight	9	19
Asphyxia	7	7
Prematurity	1	3

Table B7.7: Distribution of neonatal complications, complete facilities

	Baseline	Second Follow-up
Sepsis	6	8
Low birth weight	12	22
Asphyxia	23	26
Prematurity	9	18

Table B7.8: Maternal sepsis management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	9	100.00	(66.37 - 100)	11	100	(71.51 - 100)
Pulse / heart rate	9	100.00	(66.37 - 100)	11	100	(71.51 - 100)
Blood pressure	9	100.00	(66.37 - 100)	11	100	(71.51 - 100)
Temperature	9	100.00	(66.37 - 100)	11	100	(71.51 - 100)
Antibiotics administered	9	100.00	(66.37 - 100)	11	100	(71.51 - 100)
Causes treated appropriately	3	66.67	(9.43 - 99.16)	3	100	(29.24 - 100)
Neonatal sepsis managed according to SMI standard	9	88.89	(51.75 - 99.72)	11	100	(71.51 - 100)

Table B7.9: Maternal sepsis management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	3	100.00	(29.24 - 100)	4	100.00	(39.76 - 100)
Pulse / heart rate	3	100.00	(29.24 - 100)	4	100.00	(39.76 - 100)
Blood pressure	3	100.00	(29.24 - 100)	4	100.00	(39.76 - 100)
Temperature	3	100.00	(29.24 - 100)	4	100.00	(39.76 - 100)
Lab tests	3	33.33	(0.84 - 90.57)	4	75.00	(19.41 - 99.37)
Complete blood test	3	33.33	(0.84 - 90.57)	4	75.00	(19.41 - 99.37)
Leukocyte count	3	66.67	(9.43 - 99.16)	4	100.00	(39.76 - 100)
Platelet count	3	0.00	(0 - 70.76)	4	100.00	(39.76 - 100)
Hemoglobin	3	0.00	(0 - 70.76)	4	0.00	(0 - 60.24)
Hematocrit	3	66.67	(9.43 - 99.16)	4	100.00	(39.76 - 100)
Antibiotics administered	3	100.00	(29.24 - 100)	4	100.00	(39.76 - 100)
Causes treated appropriately	3	100.00	(29.24 - 100)	3	66.67	(9.43 - 99.16)
Neonatal sepsis managed according to SMI standard	3	33.33	(0.84 - 90.57)	4	50.00	(6.76 - 93.24)

Table B7.10: Maternal hemorrhage management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	7	100.00	(59.04 - 100)	15	80.00	(51.91 - 95.67)
Pulse / heart rate	7	100.00	(59.04 - 100)	15	80.00	(51.91 - 95.67)
Blood pressure	7	100.00	(59.04 - 100)	15	93.33	(68.05 - 99.83)
Ringer's lactate / Hartmann's / saline solution administered	7	85.71	(42.13 - 99.64)	15	73.33	(44.9 - 92.21)
Causes treated appropriately	3	66.67	(9.43 - 99.16)	9	77.78	(39.99 - 97.19)
Hemorrhage managed according to SMI standard	7	85.71	(42.13 - 99.64)	15	60.00	(32.29 - 83.66)

Table B7.11: Maternal hemorrhage management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	15	100.00	(78.2 - 100)	16	81.25	(54.35 - 95.95)
Pulse / heart rate	15	100.00	(78.2 - 100)	16	93.75	(69.77 - 99.84)
Blood pressure	15	100.00	(78.2 - 100)	16	87.50	(61.65 - 98.45)
Lab tests	15	0.00	(0 - 21.8)	16	18.75	(4.05 - 45.65)
Hematocrit	15	66.67	(38.38 - 88.18)	16	81.25	(54.35 - 95.95)
Hemoglobin	15	0.00	(0 - 21.8)	16	18.75	(4.05 - 45.65)
Platelet count	15	60.00	(32.29 - 83.66)	16	68.75	(41.34 - 88.98)
Ringer's lactate / Hartmann's / saline solution administered	15	86.67	(59.54 - 98.34)	16	81.25	(54.35 - 95.95)
Causes treated appropriately	7	85.71	(42.13 - 99.64)	12	83.33	(51.59 - 97.91)
Hemorrhage managed according to SMI standard	15	0.00	(0 - 21.8)	16	6.25	(0.16 - 30.23)

Table B7.12: Maternal pre-eclampsia management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	9	100.00	(66.37 - 100)	46	95.65	(85.16 - 99.47)
Pulse / heart rate	9	100.00	(66.37 - 100)	46	95.65	(85.16 - 99.47)
Blood pressure	9	100.00	(66.37 - 100)	46	97.83	(88.47 - 99.94)
Respiratory rate	9	100.00	(66.37 - 100)	46	95.65	(85.16 - 99.47)
Lab tests	9	55.56	(21.2 - 86.3)	46	67.39	(51.98 - 80.47)
Urine protein	9	55.56	(21.2 - 86.3)	46	67.39	(51.98 - 80.47)
All appropriate medications administered	9	44.44	(13.7 - 78.8)	46	39.13	(25.09 - 54.63)
Magnesium sulfate	9	44.44	(13.7 - 78.8)	46	39.13	(25.09 - 54.63)
Hydralazine / labetalol / nifedipine (if diastolic blood pressure > 110 at first checkup)	3	66.67	(9.43 - 99.16)	12	100.00	(73.54 - 100)
Referred to complete facility	9	44.44	(13.7 - 78.8)	46	26.09	(14.27 - 41.13)
Pre-eclampsia managed according to SMI standard	9	22.22	(2.81 - 60.01)	46	15.22	(6.34 - 28.87)

Table B7.13: Maternal pre-eclampsia management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	26	57.69	(36.92 - 76.65)	32	53.12	(34.74 - 70.91)
Pulse / heart rate	26	100.00	(86.77 - 100)	32	100.00	(89.11 - 100)
Blood pressure	26	96.15	(80.36 - 99.9)	32	100.00	(89.11 - 100)
Respiratory rate	26	100.00	(86.77 - 100)	32	100.00	(89.11 - 100)
Patellar reflex	26	57.69	(36.92 - 76.65)	32	53.12	(34.74 - 70.91)
Lab tests	26	0.00	(0 - 13.23)	32	6.25	(0.77 - 20.81)
Urine protein	26	46.15	(26.59 - 66.63)	32	62.50	(43.69 - 78.9)
Platelet count	26	57.69	(36.92 - 76.65)	32	78.12	(60.03 - 90.72)
Creatinine	26	76.92	(56.35 - 91.03)	32	68.75	(49.99 - 83.88)
Uric acid	26	30.77	(14.33 - 51.79)	32	46.88	(29.09 - 65.26)
Aspartate aminotransferase / glutamic-oxalacetic transaminase	26	53.85	(33.37 - 73.41)	32	78.12	(60.03 - 90.72)
Alanine transaminase / glutamic-pyruvic transaminase	26	57.69	(36.92 - 76.65)	32	78.12	(60.03 - 90.72)
Lactate dehydrogenase	26	0.00	(0 - 13.23)	32	12.50	(3.51 - 28.99)
All appropriate medications administered	26	30.77	(14.33 - 51.79)	32	68.75	(49.99 - 83.88)
Magnesium sulfate	26	34.62	(17.21 - 55.67)	32	68.75	(49.99 - 83.88)
Hydralazine / labetalol / nifedipine (if diastolic blood pressure > 110 at first checkup)	5	60.00	(14.66 - 94.73)	9	100.00	(66.37 - 100)
Pre-eclampsia managed according to SMI standard	26	0.00	(0 - 13.23)	32	3.12	(0.08 - 16.22)

Table B7.14: Maternal eclampsia management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	1	100	(2.5 - 100)	2	100	(15.81 - 100)
Pulse / heart rate	1	100	(2.5 - 100)	2	100	(15.81 - 100)
Blood pressure	1	100	(2.5 - 100)	2	100	(15.81 - 100)
Respiratory rate	1	100	(2.5 - 100)	2	100	(15.81 - 100)
Lab tests	1	100	(2.5 - 100)	2	100	(15.81 - 100)
Urine protein	1	100	(2.5 - 100)	2	100	(15.81 - 100)
All appropriate medications administered	1	100	(2.5 - 100)	2	100	(15.81 - 100)
Magnesium sulfate	1	100	(2.5 - 100)	2	100	(15.81 - 100)
Hydralazine / labetalol / nifedipine (if diastolic blood pressure > 110 at first checkup)	1	100	(2.5 - 100)	1	100	(2.5 - 100)
Referred to complete facility	1	0	(0 - 97.5)	2	100	(15.81 - 100)
Eclampsia managed according to SMI standard	1	0	(0 - 97.5)	2	100	(15.81 - 100)

Table B7.14: Maternal eclampsia management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	3	66.67	(9.43 - 99.16)	1	100	(2.5 - 100)
Pulse / heart rate	3	100.00	(29.24 - 100)	1	100	(2.5 - 100)
Blood pressure	3	100.00	(29.24 - 100)	1	100	(2.5 - 100)
Respiratory rate	3	100.00	(29.24 - 100)	1	100	(2.5 - 100)
Patellar reflex	3	66.67	(9.43 - 99.16)	1	100	(2.5 - 100)
Lab tests	3	0.00	(0 - 70.76)	1	0	(0 - 97.5)
Urine protein	3	100.00	(29.24 - 100)	1	100	(2.5 - 100)
Platelet count	3	100.00	(29.24 - 100)	1	100	(2.5 - 100)
Creatinine	3	100.00	(29.24 - 100)	1	100	(2.5 - 100)
Uric acid	3	33.33	(0.84 - 90.57)	1	100	(2.5 - 100)
Aspartate aminotransferase / glutamic-oxalacetic transaminase	3	100.00	(29.24 - 100)	1	100	(2.5 - 100)
Alanine transaminase / glutamic-pyruvic transaminase	3	100.00	(29.24 - 100)	1	100	(2.5 - 100)
Lactate dehydrogenase	3	0.00	(0 - 70.76)	1	0	(0 - 97.5)
All appropriate medications administered	3	100.00	(29.24 - 100)	1	100	(2.5 - 100)
Magnesium sulfate	3	100.00	(29.24 - 100)	1	100	(2.5 - 100)
Hydralazine / labetalol / nifedipine (if diastolic blood pressure > 110 at first checkup)	1	100.00	(2.5 - 100)	1	100	(2.5 - 100)
Eclampsia managed according to SMI standard	3	0.00	(0 - 70.76)	1	0	(0 - 97.5)

Table B7.15: Maternal complications management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Sepsis managed according to SMI standard	9	88.89	(51.75 - 99.72)	11	100.00	(71.51 - 100)
Hemorrhage managed according to SMI standard	7	85.71	(42.13 - 99.64)	15	60.00	(32.29 - 83.66)
Pre-eclampsia managed according to SMI standard	9	22.22	(2.81 - 60.01)	46	15.22	(6.34 - 28.87)
Eclampsia managed according to SMI standard	1	0.00	(0 - 97.5)	2	100.00	(15.81 - 100)
Complications managed according to SMI standard	26	61.54	(40.57 - 79.77)	74	39.19	(28.04 - 51.23)

Table B7.16: Maternal complications management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Sepsis managed according to SMI standard	3	33.33	(0.84 - 90.57)	4	50.00	(6.76 - 93.24)
Hemorrhage managed according to SMI standard	15	0.00	(0 - 21.8)	16	6.25	(0.16 - 30.23)
Pre-eclampsia managed according to SMI standard	26	0.00	(0 - 13.23)	32	3.12	(0.08 - 16.22)
Eclampsia managed according to SMI standard	3	0.00	(0 - 70.76)	1	0.00	(0 - 97.5)
Complications managed according to SMI standard	47	2.13	(0.05 - 11.29)	53	7.55	(2.09 - 18.21)

Table B7.17: Neonatal sepsis management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	27	74.07	(53.72 - 88.89)	31	45.16	(27.32 - 63.97)
Pulse / heart rate	27	100.00	(87.23 - 100)	31	100.00	(88.78 - 100)
Respiratory rate	27	100.00	(87.23 - 100)	31	100.00	(88.78 - 100)
Temperature	27	100.00	(87.23 - 100)	31	100.00	(88.78 - 100)
Abdominal exam	27	74.07	(53.72 - 88.89)	31	45.16	(27.32 - 63.97)
Antibiotics administered	27	92.59	(75.71 - 99.09)	31	74.19	(55.39 - 88.14)
Evaluated by doctor (basic) or specialist (complete)	27	96.30	(81.03 - 99.91)	31	74.19	(55.39 - 88.14)
Referred to complete facility (if septic shock)	-	-	-	-	-	-
Sepsis managed according to SMI standard	27	74.07	(53.72 - 88.89)	31	45.16	(27.32 - 63.97)

Table B7.18: Neonatal sepsis management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	6	66.67	(22.28 - 95.67)	8	100.0	(63.06 - 100)
Pulse / heart rate	6	100.00	(54.07 - 100)	8	100.0	(63.06 - 100)
Respiratory rate	6	100.00	(54.07 - 100)	8	100.0	(63.06 - 100)
Temperature	6	100.00	(54.07 - 100)	8	100.0	(63.06 - 100)
Abdominal exam	6	66.67	(22.28 - 95.67)	8	100.0	(63.06 - 100)
Lab tests	6	0.00	(0 - 45.93)	8	0.0	(0 - 36.94)
Complete blood test	6	16.67	(0.42 - 64.12)	8	62.5	(24.49 - 91.48)
Oxygen saturation	6	16.67	(0.42 - 64.12)	8	12.5	(0.32 - 52.65)
C-reactive protein	6	50.00	(11.81 - 88.19)	8	25.0	(3.19 - 65.09)
Neutrophil band ratio / absolute ratio	6	0.00	(0 - 45.93)	8	37.5	(8.52 - 75.51)
Antibiotics administered	6	66.67	(22.28 - 95.67)	8	100.0	(63.06 - 100)
Evaluated by doctor (basic) or specialist (complete)	6	83.33	(35.88 - 99.58)	8	100.0	(63.06 - 100)
Sepsis managed according to SMI standard	6	0.00	(0 - 45.93)	8	0.0	(0 - 36.94)

Table B7.19: Neonatal asphyxia management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	7	100.00	(59.04 - 100)	7	100.00	(59.04 - 100)
Pulse / heart rate	7	100.00	(59.04 - 100)	7	100.00	(59.04 - 100)
Respiratory rate	7	100.00	(59.04 - 100)	7	100.00	(59.04 - 100)
APGAR score at one minute	7	100.00	(59.04 - 100)	7	100.00	(59.04 - 100)
APGAR score at five minutes	7	100.00	(59.04 - 100)	7	100.00	(59.04 - 100)
Laboratory tests	7	0.00	(0 - 40.96)	7	42.86	(9.9 - 81.59)
Glycemia	7	0.00	(0 - 40.96)	7	42.86	(9.9 - 81.59)
Oxygen saturation (if APGAR <= 3 at five minutes)	-	-	-	-	-	-
Heat application	7	57.14	(18.41 - 90.1)	7	57.14	(18.41 - 90.1)
Evaluated by doctor (if basic) or specialist (if complete)	7	100.00	(59.04 - 100)	7	71.43	(29.04 - 96.33)
Referred to complete facility (if APGAR <= 3 at five minutes)	-	-	-	-	-	-
AMBU / endotracheal intubation / cardiac massage (if APGAR <= 3 at five minutes)	-	-	-	-	-	-
Asphyxia managed according to SMI standard	7	0.00	(0 - 40.96)	7	28.57	(3.67 - 70.96)

Table B7.20: Neonatal asphyxia management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	23	100.00	(85.18 - 100)	26	96.15	(80.36 - 99.9)
Pulse / heart rate	23	100.00	(85.18 - 100)	26	96.15	(80.36 - 99.9)
Respiratory rate	23	100.00	(85.18 - 100)	26	96.15	(80.36 - 99.9)
APGAR score at one minute	23	100.00	(85.18 - 100)	26	100.00	(86.77 - 100)
APGAR score at five minutes	23	100.00	(85.18 - 100)	26	100.00	(86.77 - 100)
Laboratory tests	23	60.87	(38.54 - 80.29)	26	42.31	(23.35 - 63.08)
Glycemia	23	60.87	(38.54 - 80.29)	26	42.31	(23.35 - 63.08)
Oxygen saturation (if APGAR <= 3 at five minutes)	-	-	-	1	100.00	(2.5 - 100)
Heat application	23	78.26	(56.3 - 92.54)	26	96.15	(80.36 - 99.9)
Evaluated by doctor (if basic) or specialist (if complete)	23	100.00	(85.18 - 100)	26	96.15	(80.36 - 99.9)
Referred to complete facility (if APGAR <= 3 at five minutes)	-	-	-	-	-	-
Asphyxia managed according to SMI standard	23	43.48	(23.19 - 65.51)	26	30.77	(14.33 - 51.79)

Table B7.21: Neonatal low birth weight management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	9	11.11	(0.28 - 48.25)	19	26.32	(9.15 - 51.2)
Weight	9	100.00	(66.37 - 100)	19	100.00	(82.35 - 100)
Pulse / heart rate	9	100.00	(66.37 - 100)	19	100.00	(82.35 - 100)
Respiratory rate	9	100.00	(66.37 - 100)	19	100.00	(82.35 - 100)
Head circumference	9	100.00	(66.37 - 100)	19	84.21	(60.42 - 96.62)
Silverman-Anderson / Downes test	9	11.11	(0.28 - 48.25)	19	26.32	(9.15 - 51.2)
APGAR score / skin test	9	100.00	(66.37 - 100)	19	94.74	(73.97 - 99.87)
Glycemia lab test	9	0.00	(0 - 33.63)	19	15.79	(3.38 - 39.58)
Gestational age calculated using Capurro/Ballard	9	88.89	(51.75 - 99.72)	19	94.74	(73.97 - 99.87)
Weight classification (if in-facility)	9	100.00	(66.37 - 100)	19	100.00	(82.35 - 100)
Heat application	9	77.78	(39.99 - 97.19)	19	84.21	(60.42 - 96.62)
Breastfed / given glucose	9	100.00	(66.37 - 100)	19	100.00	(82.35 - 100)
Evaluated by doctor	9	100.00	(66.37 - 100)	19	84.21	(60.42 - 96.62)
Referred to complete facility (if weight < 1500 grams at basic facility)	2	0.00	(0 - 84.19)	3	0.00	(0 - 70.76)
Appropriate management of any associated complications	1	100.00	(2.5 - 100)	2	50.00	(1.26 - 98.74)
Low birth weight managed according to SMI standard	9	0.00	(0 - 33.63)	19	0.00	(0 - 17.65)

Table B7.22: Neonatal low birth weight management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	12	66.67	(34.89 - 90.08)	22	72.73	(49.78 - 89.27)
Weight	12	100.00	(73.54 - 100)	22	100.00	(84.56 - 100)
Pulse / heart rate	12	100.00	(73.54 - 100)	22	95.45	(77.16 - 99.88)
Respiratory rate	12	100.00	(73.54 - 100)	22	90.91	(70.84 - 98.88)
Head circumference	12	91.67	(61.52 - 99.79)	22	95.45	(77.16 - 99.88)
Silverman-Anderson / Downes test	12	75.00	(42.81 - 94.51)	22	81.82	(59.72 - 94.81)
APGAR score / skin test	12	91.67	(61.52 - 99.79)	22	100.00	(84.56 - 100)
Glycemia lab test	12	75.00	(42.81 - 94.51)	22	77.27	(54.63 - 92.18)
Gestational age calculated using Capurro/Ballard	11	100.00	(71.51 - 100)	21	90.48	(69.62 - 98.83)
Weight classification (if in-facility)	11	100.00	(71.51 - 100)	21	100.00	(83.89 - 100)
Heat application	12	75.00	(42.81 - 94.51)	22	100.00	(84.56 - 100)
Breastfed / given glucose	12	91.67	(61.52 - 99.79)	22	90.91	(70.84 - 98.88)
Evaluated by doctor	12	100.00	(73.54 - 100)	22	100.00	(84.56 - 100)
Appropriate management of any associated complications	1	100.00	(2.5 - 100)	2	100.00	(15.81 - 100)
Low birth weight managed according to SMI standard	12	33.33	(9.92 - 65.11)	22	54.55	(32.21 - 75.61)

Table B7.23: Neonatal prematurity management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	1	100	(2.5 - 100)	3	0.00	(0 - 70.76)
Weight	1	100	(2.5 - 100)	3	66.67	(9.43 - 99.16)
Pulse / heart rate	1	100	(2.5 - 100)	3	66.67	(9.43 - 99.16)
Respiratory rate	1	100	(2.5 - 100)	3	66.67	(9.43 - 99.16)
Head circumference	1	100	(2.5 - 100)	3	33.33	(0.84 - 90.57)
Silverman-Anderson / Downes test	1	100	(2.5 - 100)	3	66.67	(9.43 - 99.16)
APGAR score / skin test	1	100	(2.5 - 100)	3	33.33	(0.84 - 90.57)
Glycemia lab test	1	100	(2.5 - 100)	3	66.67	(9.43 - 99.16)
Gestational age calculated using Capurro/Ballard	1	100	(2.5 - 100)	2	50.00	(1.26 - 98.74)
Weight classification (if in-facility)	1	100	(2.5 - 100)	2	100.00	(15.81 - 100)
Heat application	1	100	(2.5 - 100)	3	33.33	(0.84 - 90.57)
Breastfed / given glucose	1	100	(2.5 - 100)	3	100.00	(29.24 - 100)
Evaluated by doctor	1	100	(2.5 - 100)	3	100.00	(29.24 - 100)
Referred to complete facility (if weight < 1500 grams at basic facility)	-	-	-	-	-	-
Appropriate management of any associated complications	-	-	-	1	100.00	(2.5 - 100)
prematurity managed according to SMI standard	1	100	(2.5 - 100)	3	0.00	(0 - 70.76)

Table B7.24: Neonatal complications management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Sepsis managed according to SMI standard	27	74.07	(53.72 - 88.89)	31	45.16	(27.32 - 63.97)
Asphyxia managed according to SMI standard	7	0.00	(0 - 40.96)	7	28.57	(3.67 - 70.96)
Low birth weight managed according to SMI standard	9	0.00	(0 - 33.63)	19	0.00	(0 - 17.65)
Prematurity managed according to SMI standard	1	100.00	(2.5 - 100)	3	0.00	(0 - 70.76)
Complications managed according to SMI standard	43	48.84	(33.31 - 64.54)	60	26.67	(16.07 - 39.66)

Table B7.25: Neonatal complications management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Sepsis managed according to SMI standard	6	0.00	(0 - 45.93)	8	0.00	(0 - 36.94)
Asphyxia managed according to SMI standard	23	43.48	(23.19 - 65.51)	26	30.77	(14.33 - 51.79)
Low birth weight managed according to SMI standard	12	33.33	(9.92 - 65.11)	22	54.55	(32.21 - 75.61)
Prematurity managed according to SMI standard	9	0.00	(0 - 33.63)	18	16.67	(3.58 - 41.42)
Complications managed according to SMI standard	47	27.66	(15.62 - 42.64)	68	30.88	(20.24 - 43.26)

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

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Incinerator at facility	23	56.5	(34.5 - 76.8)	19	63.2	(38.4 - 83.7)
Contract with other facility for disposal (if no incinerator)	10	20.0	(2.5 - 55.6)	7	42.9	(9.9 - 81.6)
Manual for decontamination	23	52.2	(30.6 - 73.2)	19	57.9	(33.5 - 79.7)

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

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Incinerator at facility	1	100	(2.5 - 100)	8	87.5	(47.3 - 99.7)
Contract with other facility for disposal (if no incinerator)	-	-	-	1	0.0	(0 - 97.5)
Manual for decontamination	1	100	(2.5 - 100)	8	62.5	(24.5 - 91.5)

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

	Second Follow-Up		
	N	%	CI
Incinerator at facility	3	100.0	(29.2 - 100)
Contract with other facility for disposal (if no incinerator)	-	-	-
Manual for decontamination	3	66.7	(9.4 - 99.2)

Appendix C: Comparison Matrices

Table C.1: Appendix C.1: Comparison performance matrix

Code	Description	Baseline			Second Follow-Up		
		N	%	CI	N	%	CI
3040	First ANC visit within 12 weeks	73	38.4	(27.2 - 50.5)	178	55.6	(48 - 63)
4070	Neonatal complications management	90	37.8	(27.8 - 48.6)	128	28.9	(21.2 - 37.6)
4080	Maternal complications management	73	23.3	(14.2 - 34.6)	127	26.0	(18.6 - 34.5)
4103	Immediate postpartum neonatal care	12	0.0	(0 - 26.5)	120	30.8	(22.7 - 39.9)
FP	Postpartum contraception	3	33.3	(0.8 - 90.6)	61	90.2	(79.8 - 96.3)

¹ 3040: 1st and 2nd follow-up use reported gestational age while baseline uses calculated gestational age.

² 4070 & 4080: Data from medical records from the baseline timeframe of complications were recollected during the 36-month evaluation. Indicator values and definitions have been updated accordingly.

Table C.2: Appendix C.2: Comparison monitoring matrix

Code	Description	Baseline			Second Follow-Up		
		N	%	CI	N	%	CI
3030	4+ ANC visits according to the norm	79	21.5	(13.1 - 32.2)	203	20.2	(14.9 - 26.4)
4050	Immediate postpartum maternal care	-	-	-	117	85.5	(77.8 - 91.3)
4065	Partograph revision	-	-	-	131	96.2	(91.3 - 98.7)
4095	Active management of third stage of labor	12	91.7	(61.5 - 99.8)	131	89.3	(82.7 - 94)
7000	Cold chain composite	19	42.1	(20.3 - 66.5)	18	72.2	(46.5 - 90.3)
7010	Childcare services composite	22	27.3	(10.7 - 50.2)	26	30.8	(14.3 - 51.8)
7020	Pre/postnatal care composite	23	17.4	(5 - 38.8)	26	53.8	(33.4 - 73.4)
7030	Emergency care composite	1	100.0	(2.5 - 100)	7	42.9	(9.9 - 81.6)
7050	Family planning composite	23	69.6	(47.1 - 86.8)	24	70.8	(48.9 - 87.4)
8870	Socio-cultural conditions	3	33.3	(0.8 - 90.6)	3	66.7	(9.4 - 99.2)

¹ 4050 & 4065: This indicator was not captured at the baseline evaluation.

² 7010: Vaccine three-month stock only captured for MMR and BCG at baseline and first follow-up evaluations.

³ 7030: Three-month stock only captured for dexamethasone, gentamicin, magnesium sulfate, and oxytocin at baseline evaluation.

⁴ 7050: IUD three-month stock not captured at baseline evaluation.

Appendix D: Combined intervention and comparison area tables

Table D2.1: Health facility classification

EONC	Baseline	First Follow-Up	Second Follow-Up
Ambulatory	55	46	56
Basic	6	11	28
Complete	3	3	6
Total	64	60	90

Table D2.2: Number of facilities by municipality and health department

Department	Municipality	Baseline Facilities	First Follow-up Facilities	Second Follow-up Facilities
Bilwi	Prinzapolka	-	-	3
Bilwi	Puerto Cabezas	-	13	7
Bilwi	Waspán	-	7	2
Chontales	El Ayote	1	-	2
Chontales	Juigalpa	-	-	1
Jinotega	Bocay	2	3	2
Jinotega	El Cua	4	5	4
Jinotega	Jinotega	16	-	12
Jinotega	San Sebastián de Yali	2	2	3
Jinotega	Santa Maria de Pantasma	1	1	3
Jinotega	Wiwilí	2	1	4
Las Minas	Bocana de Paiwas	-	1	1
Las Minas	Bonanza	-	2	2
Las Minas	Mulukuku	-	1	2
Las Minas	Paiwas	-	-	2
Las Minas	Rosita	-	3	2
Las Minas	Siuna	-	4	3
Madriz	San Juan Río Coco	5	-	6
Madriz	Somoto	-	-	1
Madriz	Telpaneca	2	-	4
Matagalpa	Bocana de Paiwas	3	-	-
Matagalpa	Matagalpa	5	1	1
Matagalpa	Matiguás	3	3	5
Matagalpa	Rancho Grande	-	1	3
Matagalpa	San Dionisio	-	2	1
Matagalpa	Terrabona	-	2	3
Matagalpa	Tuma - La Dalia	4	5	5
Matagalpa	Waslala	-	3	1
Nueva Segovia	Jalapa	-	-	1
Nueva Segovia	Ocotál	-	-	1
Nueva Segovia	Quilali	-	-	1
RAAN	Bonanza	1	-	-
RAAN	Puerto Cabezas	6	-	-
RAAN	Rosita	2	-	-
RAAN	Siuna	2	-	-
RAAN	Waspán	3	-	-
Zelaya Central	El Rama	-	-	1
Zelaya Central	Muelles de los Buetes	-	-	1

* At baseline, municipalities were categorized based on governmental department. At first and second follow-up, municipalities are categorized based on the Local Comprehensive Health Care System (SILAIS) regions.

Figure D2.1: Geographical representation of facilities

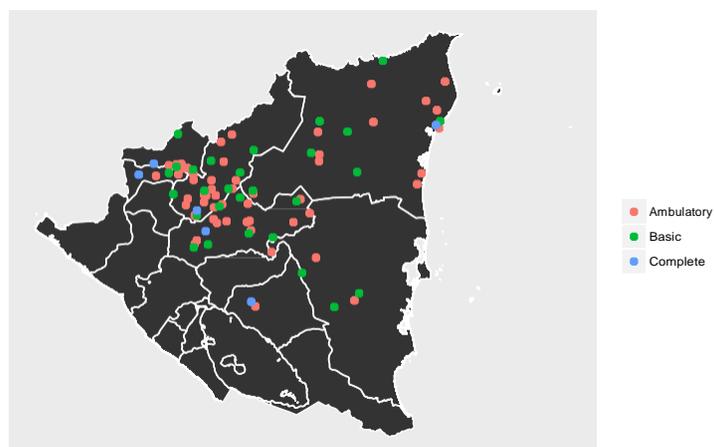


Table D2.3: Medical record extraction by facility type

Record Type	Baseline			First Follow-Up			Second Follow-Up		
	Ambulatory	Basic	Complete	Ambulatory	Basic	Complete	Ambulatory	Basic	Complete
Antenatal care	560	67	24	415	105	49	578	117	0
Postpartum care	0	65	24	0	140	51	0	296	115
Delivery	0	78	24	0	172	49	0	325	122
Maternal complications	0	222	207	0	172	70	0	336	135
Neonatal complications	0	230	194	0	168	69	0	304	140
Total	560	662	473	415	757	288	578	1378	512

Table D2.4: Referrals, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Receives referred patients from other facilities	55	34.5	(22.2 - 48.6)	45	46.7	(31.7 - 62.1)	56	25.0	(14.4 - 38.4)
Receives referred routine deliveries	-	-	-	-	-	-	14	28.6	(8.4 - 58.1)
Receives referred complicated deliveries	-	-	-	-	-	-	14	0.0	(0 - 23.2)
Sends patient referrals to other facilities	55	100.0	(93.5 - 100)	45	97.8	(88.2 - 99.9)	56	96.4	(87.7 - 99.6)
Sends referred routine deliveries	-	-	-	-	-	-	54	92.6	(82.1 - 97.9)
Sends referred complicated deliveries	-	-	-	-	-	-	54	98.1	(90.1 - 100)

Table D2.5: Referrals, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Receives referred patients from other facilities	6	100	(54.1 - 100)	11	90.9	(58.7 - 99.8)	28	100.0	(87.7 - 100)
Receives referred routine deliveries	-	-	-	-	-	-	28	92.9	(76.5 - 99.1)
Receives referred complicated deliveries	-	-	-	-	-	-	28	82.1	(63.1 - 93.9)
Sends patient referrals to other facilities	6	100	(54.1 - 100)	11	100.0	(71.5 - 100)	28	100.0	(87.7 - 100)
Sends referred routine deliveries	-	-	-	-	-	-	28	21.4	(8.3 - 41)
Sends referred complicated deliveries	-	-	-	-	-	-	28	82.1	(63.1 - 93.9)

Table D2.6: Referrals, complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Receives referred patients from other facilities	3	100	(29.2 - 100)	3	100	(29.2 - 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	3	100	(29.2 - 100)	3	100	(29.2 - 100)	6	100.0	(54.1 - 100)
Sends referred routine deliveries	-	-	-	-	-	-	6	0.0	(0 - 45.9)
Sends referred complicated deliveries	-	-	-	-	-	-	6	33.3	(4.3 - 77.7)

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

	Ambulatory			Basic			Complete		
	N	%	CI	N	%	CI	N	%	CI
Routine Deliveries									
Referral sheet	4	100	(39.8 - 100)	26	100.0	(86.8 - 100)	6	100.0	(54.1 - 100)
Patient medical record	4	25	(0.6 - 80.6)	26	42.3	(23.4 - 63.1)	6	50.0	(11.8 - 88.2)
Lab tests	4	0	(0 - 60.2)	26	7.7	(0.9 - 25.1)	6	0.0	(0 - 45.9)
Proof of insurance	4	0	(0 - 60.2)	26	0.0	(0 - 13.2)	6	0.0	(0 - 45.9)
Other documentation	4	25	(0.6 - 80.6)	26	61.5	(40.6 - 79.8)	6	50.0	(11.8 - 88.2)
Complicated Deliveries									
Referral sheet	-	-	-	23	100.0	(85.2 - 100)	6	100.0	(54.1 - 100)
Patient medical record	-	-	-	23	43.5	(23.2 - 65.5)	6	66.7	(22.3 - 95.7)
Lab tests	-	-	-	23	17.4	(5 - 38.8)	6	0.0	(0 - 45.9)
Proof of insurance	-	-	-	23	0.0	(0 - 14.8)	6	0.0	(0 - 45.9)
Other documentation	-	-	-	23	65.2	(42.7 - 83.6)	6	66.7	(22.3 - 95.7)

Table D2.8: Personnel employed, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
General physician	55	40.0	(27 - 54.1)	45	37.8	(23.8 - 53.5)	56	42.9	(29.7 - 56.8)
Pediatrician	55	3.6	(0.4 - 12.5)	45	4.4	(0.5 - 15.1)	56	0.0	(0 - 6.4)
Nutritionist	55	1.8	(0 - 9.7)	45	2.2	(0.1 - 11.8)	56	0.0	(0 - 6.4)
Pharmacist	55	3.6	(0.4 - 12.5)	45	15.6	(6.5 - 29.5)	56	0.0	(0 - 6.4)
Nurse	55	63.6	(49.6 - 76.2)	45	73.3	(58.1 - 85.4)	56	50.0	(36.3 - 63.7)
Auxiliary nurse	55	61.8	(47.7 - 74.6)	45	48.9	(33.7 - 64.2)	56	67.9	(54 - 79.7)
Social worker	55	7.3	(2 - 17.6)	45	6.7	(1.4 - 18.3)	56	0.0	(0 - 6.4)
Lab technician	54	9.3	(3.1 - 20.3)	45	13.3	(5.1 - 26.8)	56	0.0	(0 - 6.4)
Ambulance driver	54	16.7	(7.9 - 29.3)	45	24.4	(12.9 - 39.5)	56	5.4	(1.1 - 14.9)
Social service doctor	-	-	-	45	53.3	(37.9 - 68.3)	56	44.6	(31.3 - 58.5)
Social service nurse	-	-	-	45	20.0	(9.6 - 34.6)	56	28.6	(17.3 - 42.2)
Community health worker	-	-	-	-	-	-	56	83.9	(71.7 - 92.4)

* Ambulance driver data missing for one facility at baseline.

Table D2.9: Personnel employed, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
General physician	6	100.0	(54.1 - 100)	11	100.0	(71.5 - 100)	28	96.4	(81.7 - 99.9)
Pediatrician	6	100.0	(54.1 - 100)	11	100.0	(71.5 - 100)	28	67.9	(47.6 - 84.1)
Nutritionist	6	16.7	(0.4 - 64.1)	11	9.1	(0.2 - 41.3)	28	10.7	(2.3 - 28.2)
Pharmacist	6	16.7	(0.4 - 64.1)	11	18.2	(2.3 - 51.8)	28	60.7	(40.6 - 78.5)
Nurse	6	100.0	(54.1 - 100)	11	90.9	(58.7 - 99.8)	28	96.4	(81.7 - 99.9)
Auxiliary nurse	6	100.0	(54.1 - 100)	11	100.0	(71.5 - 100)	28	96.4	(81.7 - 99.9)
Social worker	6	0.0	(0 - 45.9)	11	0.0	(0 - 28.5)	28	10.7	(2.3 - 28.2)
Lab technician	6	100.0	(54.1 - 100)	11	90.9	(58.7 - 99.8)	28	96.4	(81.7 - 99.9)
Internist	6	100.0	(54.1 - 100)	11	63.6	(30.8 - 89.1)	28	53.6	(33.9 - 72.5)
Gynecologist	6	100.0	(54.1 - 100)	11	100.0	(71.5 - 100)	28	71.4	(51.3 - 86.8)
Surgeon	6	100.0	(54.1 - 100)	11	90.9	(58.7 - 99.8)	28	60.7	(40.6 - 78.5)
Anesthesiologist	6	33.3	(4.3 - 77.7)	11	72.7	(39 - 94)	28	50.0	(30.6 - 69.4)
Emergency medical technician	6	16.7	(0.4 - 64.1)	11	27.3	(6 - 61)	28	14.3	(4 - 32.7)
Radiology technician	6	66.7	(22.3 - 95.7)	11	54.5	(23.4 - 83.3)	28	32.1	(15.9 - 52.4)
Ambulance driver	5	100.0	(47.8 - 100)	11	100.0	(71.5 - 100)	28	100.0	(87.7 - 100)
Social service doctor	-	-	-	11	100.0	(71.5 - 100)	28	96.4	(81.7 - 99.9)
Social service nurse	-	-	-	11	72.7	(39 - 94)	28	85.7	(67.3 - 96)
Community health worker	-	-	-	-	-	-	28	75.0	(55.1 - 89.3)
Maintenance worker	6	50.0	(11.8 - 88.2)	11	81.8	(48.2 - 97.7)	28	46.4	(27.5 - 66.1)

* Ambulance driver data missing for one facility at baseline.

Table D2.10: Personnel employed, complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
General physician	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	6	100.0	(54.1 - 100)
Pediatrician	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	6	100.0	(54.1 - 100)
Nutritionist	3	66.7	(9.4 - 99.2)	3	66.7	(9.4 - 99.2)	6	83.3	(35.9 - 99.6)
Pharmacist	3	66.7	(9.4 - 99.2)	3	66.7	(9.4 - 99.2)	6	100.0	(54.1 - 100)
Nurse	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	6	100.0	(54.1 - 100)
Auxiliary nurse	3	66.7	(9.4 - 99.2)	3	100.0	(29.2 - 100)	6	100.0	(54.1 - 100)
Social worker	3	66.7	(9.4 - 99.2)	3	100.0	(29.2 - 100)	6	83.3	(35.9 - 99.6)
Lab technician	3	33.3	(0.8 - 90.6)	3	100.0	(29.2 - 100)	6	100.0	(54.1 - 100)
Internist	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	6	100.0	(54.1 - 100)
Gynecologist	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	6	100.0	(54.1 - 100)
Surgeon	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	6	100.0	(54.1 - 100)
Anesthesiologist	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	6	100.0	(54.1 - 100)
Emergency medical technician	2	0.0	(0 - 84.2)	3	100.0	(29.2 - 100)	6	66.7	(22.3 - 95.7)
Radiology technician	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	6	100.0	(54.1 - 100)
Ambulance driver	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	6	100.0	(54.1 - 100)
Social service doctor	-	-	-	3	66.7	(9.4 - 99.2)	6	100.0	(54.1 - 100)
Social service nurse	-	-	-	3	100.0	(29.2 - 100)	6	83.3	(35.9 - 99.6)
Community health worker	-	-	-	-	-	-	6	16.7	(0.4 - 64.1)
Maintenance worker	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	6	100.0	(54.1 - 100)

* Emergency medical technician data missing for one facility at baseline.

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Functional electricity supply	55	90.9	(80 - 97)	45	86.7	(73.2 - 94.9)	56	85.7	(73.8 - 93.6)
Public electricity network	50	92.0	(80.8 - 97.8)	39	89.7	(75.8 - 97.1)	48	93.8	(82.8 - 98.7)
Private electricity network	50	2.0	(0.1 - 10.6)	39	0.0	(0 - 9)	48	0.0	(0 - 7.4)
Emergency electric plant	50	6.0	(1.3 - 16.5)	39	0.0	(0 - 9)	48	2.1	(0.1 - 11.1)
Solar generator	50	10.0	(3.3 - 21.8)	39	20.5	(9.3 - 36.5)	48	8.3	(2.3 - 20)
Other source	50	6.0	(1.3 - 16.5)	39	5.1	(0.6 - 17.3)	48	2.1	(0.1 - 11.1)
Functional water supply	55	70.9	(57.1 - 82.4)	45	93.3	(81.7 - 98.6)	56	69.6	(55.9 - 81.2)
Public water network	55	56.4	(42.3 - 69.7)	45	53.3	(37.9 - 68.3)	56	46.4	(33 - 60.3)
Public well	55	18.2	(9.1 - 30.9)	45	33.3	(20 - 49)	56	12.5	(5.2 - 24.1)
Protected well at facility	55	10.9	(4.1 - 22.2)	45	17.8	(8 - 32.1)	56	8.9	(3 - 19.6)
Unprotected well	55	3.6	(0.4 - 12.5)	45	2.2	(0.1 - 11.8)	56	3.6	(0.4 - 12.3)
Manual pump	55	1.8	(0 - 9.7)	45	2.2	(0.1 - 11.8)	56	0.0	(0 - 6.4)
Bottled water	55	1.8	(0 - 9.7)	45	0.0	(0 - 7.9)	56	3.6	(0.4 - 12.3)
Tank or pipe truck	55	0.0	(0 - 6.5)	45	0.0	(0 - 7.9)	56	3.6	(0.4 - 12.3)
Rain water	55	1.8	(0 - 9.7)	45	2.2	(0.1 - 11.8)	56	8.9	(3 - 19.6)
Other source	55	12.7	(5.3 - 24.5)	45	6.7	(1.4 - 18.3)	56	21.4	(11.6 - 34.4)

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Functional electricity supply	6	100.0	(54.1 - 100)	11	100.0	(71.5 - 100)	28	100.0	(87.7 - 100)
Public electricity network	6	100.0	(54.1 - 100)	11	90.9	(58.7 - 99.8)	28	96.4	(81.7 - 99.9)
Private electricity network	6	0.0	(0 - 45.9)	11	0.0	(0 - 28.5)	28	0.0	(0 - 12.3)
Emergency electric plant	6	16.7	(0.4 - 64.1)	11	45.5	(16.7 - 76.6)	28	21.4	(8.3 - 41)
Solar generator	6	0.0	(0 - 45.9)	11	0.0	(0 - 28.5)	28	3.6	(0.1 - 18.3)
Other source	6	0.0	(0 - 45.9)	11	9.1	(0.2 - 41.3)	28	0.0	(0 - 12.3)
Functional water supply	6	100.0	(54.1 - 100)	11	100.0	(71.5 - 100)	28	100.0	(87.7 - 100)
Public water network	6	50.0	(11.8 - 88.2)	11	54.5	(23.4 - 83.3)	28	67.9	(47.6 - 84.1)
Public well	6	0.0	(0 - 45.9)	11	9.1	(0.2 - 41.3)	28	7.1	(0.9 - 23.5)
Protected well at facility	6	50.0	(11.8 - 88.2)	11	18.2	(2.3 - 51.8)	28	35.7	(18.6 - 55.9)
Unprotected well	6	0.0	(0 - 45.9)	11	9.1	(0.2 - 41.3)	28	0.0	(0 - 12.3)
Manual pump	6	0.0	(0 - 45.9)	11	0.0	(0 - 28.5)	28	0.0	(0 - 12.3)
Bottled water	6	0.0	(0 - 45.9)	11	0.0	(0 - 28.5)	28	0.0	(0 - 12.3)
Tank or pipe truck	6	0.0	(0 - 45.9)	11	0.0	(0 - 28.5)	28	3.6	(0.1 - 18.3)
Rain water	6	0.0	(0 - 45.9)	11	0.0	(0 - 28.5)	28	3.6	(0.1 - 18.3)
Other source	6	33.3	(4.3 - 77.7)	11	36.4	(10.9 - 69.2)	28	3.6	(0.1 - 18.3)

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Functional electricity supply	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	6	100.0	(54.1 - 100)
Public electricity network	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	6	100.0	(54.1 - 100)
Private electricity network	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)	6	0.0	(0 - 45.9)
Emergency electric plant	3	33.3	(0.8 - 90.6)	3	0.0	(0 - 70.8)	6	66.7	(22.3 - 95.7)
Solar generator	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)	6	0.0	(0 - 45.9)
Other source	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)	6	0.0	(0 - 45.9)
Functional water supply	3	100.0	(29.2 - 100)	3	66.7	(9.4 - 99.2)	6	100.0	(54.1 - 100)
Public water network	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	6	100.0	(54.1 - 100)
Public well	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)	6	0.0	(0 - 45.9)
Protected well at facility	3	33.3	(0.8 - 90.6)	3	33.3	(0.8 - 90.6)	6	33.3	(4.3 - 77.7)
Unprotected well	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)	6	0.0	(0 - 45.9)
Manual pump	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)	6	0.0	(0 - 45.9)
Bottled water	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)	6	0.0	(0 - 45.9)
Tank or pipe truck	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)	6	16.7	(0.4 - 64.1)
Rain water	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)	6	0.0	(0 - 45.9)
Other source	3	0.0	(0 - 70.8)	3	0.0	(0 - 70.8)	6	50.0	(11.8 - 88.2)

Table D2.14: Internet access, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Functional internet connection	55	3.6	(0.4 - 12.5)	45	11.1	(3.7 - 24.1)	56	12.5	(5.2 - 24.1)

Table D2.15: Internet access, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Functional internet connection	6	33.3	(4.3 - 77.7)	11	90.9	(58.7 - 99.8)	28	78.6	(59 - 91.7)

Table D2.16: Internet access, complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Functional internet connection	3	100	(29.2 - 100)	3	100	(29.2 - 100)	6	83.3	(35.9 - 99.6)

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Provides childcare services	55	100.0	(93.5 - 100)	45	100.0	(92.1 - 100)	56	100.0	(93.6 - 100)
Vaccinates children under five	55	94.5	(84.9 - 98.9)	45	86.7	(73.2 - 94.9)	56	100.0	(93.6 - 100)
Child health care area									
Visual and auditory privacy	53	79.2	(65.9 - 89.2)	42	61.9	(45.6 - 76.4)	56	64.3	(50.4 - 76.6)
Non private area	53	18.9	(9.4 - 32)	42	28.6	(15.7 - 44.6)	56	26.8	(15.8 - 40.3)
Visual privacy only	53	0.0	(0 - 6.7)	42	9.5	(2.7 - 22.6)	56	7.1	(2 - 17.3)
Other	53	1.9	(0 - 10.1)	42	0.0	(0 - 8.4)	56	0.0	(0 - 6.4)
Do not provide service	53	0.0	(0 - 6.7)	42	0.0	(0 - 8.4)	56	1.8	(0 - 9.6)

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Provides childcare services	6	100	(54.1 - 100)	11	100.0	(71.5 - 100)	28	100.0	(87.7 - 100)
Vaccinates children under five	6	100	(54.1 - 100)	11	100.0	(71.5 - 100)	28	92.9	(76.5 - 99.1)
Child health care area									
Visual and auditory privacy	6	100	(54.1 - 100)	11	81.8	(48.2 - 97.7)	28	78.6	(59 - 91.7)
Non private area	6	0	(0 - 45.9)	11	9.1	(0.2 - 41.3)	28	10.7	(2.3 - 28.2)
Visual privacy only	6	0	(0 - 45.9)	11	9.1	(0.2 - 41.3)	28	0.0	(0 - 12.3)
Other	6	0	(0 - 45.9)	11	0.0	(0 - 28.5)	28	7.1	(0.9 - 23.5)
Do not provide service	6	0	(0 - 45.9)	11	0.0	(0 - 28.5)	28	3.6	(0.1 - 18.3)

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Provides childcare services	3	100	(29.2 - 100)	3	66.7	(9.4 - 99.2)	6	83.3	(35.9 - 99.6)
Vaccinates children under five	3	100	(29.2 - 100)	3	100.0	(29.2 - 100)	6	50.0	(11.8 - 88.2)
Child health care area									
Visual and auditory privacy	2	100	(15.8 - 100)	3	100.0	(29.2 - 100)	6	66.7	(22.3 - 95.7)
Non private area	2	0	(0 - 84.2)	3	0.0	(0 - 70.8)	6	33.3	(4.3 - 77.7)
Visual privacy only	2	0	(0 - 84.2)	3	0.0	(0 - 70.8)	6	0.0	(0 - 45.9)
Other	2	0	(0 - 84.2)	3	0.0	(0 - 70.8)	6	0.0	(0 - 45.9)
Do not provide service	2	0	(0 - 84.2)	3	0.0	(0 - 70.8)	6	0.0	(0 - 45.9)

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Pediatric scales	53	84.9	(72.4 - 93.3)	42	100.0	(91.6 - 100)	55	83.6	(71.2 - 92.2)
Height rod	53	94.3	(84.3 - 98.8)	42	100.0	(91.6 - 100)	55	98.2	(90.3 - 100)
Stethoscope	53	86.8	(74.7 - 94.5)	42	97.6	(87.4 - 99.9)	55	100.0	(93.5 - 100)
Thermometer	53	73.6	(59.7 - 84.7)	42	95.2	(83.8 - 99.4)	55	100.0	(93.5 - 100)
Growth / Development card	53	94.3	(84.3 - 98.8)	42	92.9	(80.5 - 98.5)	55	92.7	(82.4 - 98)
All equipment observed and functional	53	56.6	(42.3 - 70.2)	42	90.5	(77.4 - 97.3)	55	80.0	(67 - 89.6)

* Digital thermometer only captured as alternative to oral/axillary thermometers at second follow-up evaluation.

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Pediatric scales	6	83.3	(35.9 - 99.6)	11	100.0	(71.5 - 100)	27	100.0	(87.2 - 100)
Height rod	6	66.7	(22.3 - 95.7)	11	100.0	(71.5 - 100)	27	96.3	(81 - 99.9)
Stethoscope	6	100.0	(54.1 - 100)	11	100.0	(71.5 - 100)	27	96.3	(81 - 99.9)
Pediatric stethoscope	6	0.0	(0 - 45.9)	11	90.9	(58.7 - 99.8)	27	77.8	(57.7 - 91.4)
Thermometer	6	33.3	(4.3 - 77.7)	11	100.0	(71.5 - 100)	27	100.0	(87.2 - 100)
Growth / Development card	6	16.7	(0.4 - 64.1)	11	90.9	(58.7 - 99.8)	27	74.1	(53.7 - 88.9)
All equipment observed and functional	6	0.0	(0 - 45.9)	11	81.8	(48.2 - 97.7)	27	63.0	(42.4 - 80.6)

* Digital thermometer only captured as alternative to oral/axillary thermometers at second follow-up evaluation.

Table D3.6: Child health care pharmacy inputs, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Oral rehydration salts	53	92.5	(81.8 - 97.9)	42	100.0	(91.6 - 100)	55	85.5	(73.3 - 93.5)
Ferrous sulfate / zinc sulfate / zinc gluconate	53	98.1	(89.9 - 100)	42	100.0	(91.6 - 100)	55	96.4	(87.5 - 99.6)
Albendazole / mebendazole	53	96.2	(87 - 99.5)	42	92.9	(80.5 - 98.5)	55	98.2	(90.3 - 100)
All drugs observed on day of observation	53	86.8	(74.7 - 94.5)	42	92.9	(80.5 - 98.5)	55	83.6	(71.2 - 92.2)
All drugs continuously available in past three months	53	83.0	(70.2 - 91.9)	42	90.5	(77.4 - 97.3)	55	74.5	(61 - 85.3)

* Ferrous sulfate three-month stock not captured at baseline.

Table D3.7: Child health care pharmacy inputs, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Oral rehydration salts	6	83.3	(35.9 - 99.6)	11	100.0	(71.5 - 100)	27	96.3	(81 - 99.9)
Ferrous sulfate / zinc sulfate / zinc gluconate	6	100.0	(54.1 - 100)	11	100.0	(71.5 - 100)	27	100.0	(87.2 - 100)
Albendazole / mebendazole	6	100.0	(54.1 - 100)	11	100.0	(71.5 - 100)	27	100.0	(87.2 - 100)
Erythromycin / amoxicillin / penicillin benzathine	6	100.0	(54.1 - 100)	11	100.0	(71.5 - 100)	27	100.0	(87.2 - 100)
All drugs observed on day of observation	6	83.3	(35.9 - 99.6)	11	100.0	(71.5 - 100)	27	96.3	(81 - 99.9)
All drugs continuously available in past three months	6	50.0	(11.8 - 88.2)	11	81.8	(48.2 - 97.7)	27	77.8	(57.7 - 91.4)

* Ferrous sulfate three-month stock not captured at baseline.

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Pentavalent / (DPT + Hep B + HiB)	31	100.0	(88.8 - 100)	20	100	(83.2 - 100)	35	97.1	(85.1 - 99.9)
Polio	31	93.5	(78.6 - 99.2)	20	100	(83.2 - 100)	35	97.1	(85.1 - 99.9)
Measles, Mumps, Rubella	31	96.8	(83.3 - 99.9)	20	100	(83.2 - 100)	35	97.1	(85.1 - 99.9)
Rotavirus	31	96.8	(83.3 - 99.9)	20	100	(83.2 - 100)	35	94.3	(80.8 - 99.3)
Pneumococcal conjugate	31	77.4	(58.9 - 90.4)	20	100	(83.2 - 100)	35	97.1	(85.1 - 99.9)
BCG	31	38.7	(21.8 - 57.8)	20	100	(83.2 - 100)	35	97.1	(85.1 - 99.9)
All vaccines observed on day of survey	40	22.5	(10.8 - 38.5)	23	100	(85.2 - 100)	35	88.6	(73.3 - 96.8)
All vaccines continuously available in past three months	40	22.5	(10.8 - 38.5)	23	87	(66.4 - 97.2)	35	74.3	(56.7 - 87.5)

* Vaccine three-month stock only captured for MMR and BCG at baseline and first follow-up.

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

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Pentavalent / (DPT + Hep B + HiB)	6	100.0	(54.1 - 100)	10	100	(69.2 - 100)	25	100	(86.3 - 100)
Polio	6	100.0	(54.1 - 100)	10	100	(69.2 - 100)	25	100	(86.3 - 100)
Measles, Mumps, Rubella	6	100.0	(54.1 - 100)	10	100	(69.2 - 100)	25	100	(86.3 - 100)
Rotavirus	6	83.3	(35.9 - 99.6)	10	100	(69.2 - 100)	25	100	(86.3 - 100)
Pneumococcal conjugate	6	33.3	(4.3 - 77.7)	10	90	(55.5 - 99.7)	25	92	(74 - 99)
BCG	6	16.7	(0.4 - 64.1)	10	100	(69.2 - 100)	25	96	(79.6 - 99.9)
All vaccines observed on day of survey	6	16.7	(0.4 - 64.1)	10	90	(55.5 - 99.7)	25	88	(68.8 - 97.5)
All vaccines continuously available in past three months	6	16.7	(0.4 - 64.1)	10	80	(44.4 - 97.5)	25	84	(63.9 - 95.5)

* Vaccine three-month stock only captured for MMR and BCG at baseline and first follow-up.

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

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
All equipment observed and functional	53	56.6	(42.3 - 70.2)	42	90.5	(77.4 - 97.3)	55	80.0	(67 - 89.6)
All pharmacy inputs continuously available in past three months	53	83.0	(70.2 - 91.9)	42	90.5	(77.4 - 97.3)	55	74.5	(61 - 85.3)
All vaccines continuously available in past three months	40	22.5	(10.8 - 38.5)	23	87.0	(66.4 - 97.2)	35	74.3	(56.7 - 87.5)
Child health care provision according to standard	53	18.9	(9.4 - 32)	42	76.2	(60.5 - 87.9)	55	52.7	(38.8 - 66.3)

* Ferrous sulfate three-month stock not captured at baseline.

† Vaccine three-month stock only captured for MMR and BCG at baseline and first follow-up.

‡ Digital thermometer only captured as alternative to oral/axillary thermometers at second follow-up evaluation.

§ Kardex data and three month-stock data not captured for all drugs at baseline evaluation.

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
All equipment observed and functional	6	0.0	(0 - 45.9)	11	81.8	(48.2 - 97.7)	27	63.0	(42.4 - 80.6)
All pharmacy inputs continuously available in past three months	6	50.0	(11.8 - 88.2)	11	81.8	(48.2 - 97.7)	27	77.8	(57.7 - 91.4)
All vaccines continuously available in past three months	6	16.7	(0.4 - 64.1)	10	80.0	(44.4 - 97.5)	25	84.0	(63.9 - 95.5)
Child health care provision according to standard	6	0.0	(0 - 45.9)	11	63.6	(30.8 - 89.1)	27	40.7	(22.4 - 61.2)

* Ferrous sulfate three-month stock not captured at baseline.

† Vaccine three-month stock only captured for MMR and BCG at baseline and first follow-up.

‡ Digital thermometer only captured as alternative to oral/axillary thermometers at second follow-up evaluation.

§ Kardex data and three month-stock data not captured for all drugs at baseline evaluation.

Table D4.1: Immunization services provision, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Vaccinates children under five	55	94.5	(84.9 - 98.9)	45	86.7	(73.2 - 94.9)	56	100.0	(93.6 - 100)
Immunization area									
Visual and auditory privacy	51	39.2	(25.8 - 53.9)	38	55.3	(38.3 - 71.4)	56	62.5	(48.5 - 75.1)
Non private area	51	52.9	(38.5 - 67.1)	38	26.3	(13.4 - 43.1)	56	26.8	(15.8 - 40.3)
Visual privacy only	51	2.0	(0 - 10.4)	38	10.5	(2.9 - 24.8)	56	7.1	(2 - 17.3)
Other	51	3.9	(0.5 - 13.5)	38	0.0	(0 - 9.3)	56	0.0	(0 - 6.4)
Do not provide service	51	2.0	(0 - 10.4)	38	7.9	(1.7 - 21.4)	56	3.6	(0.4 - 12.3)

* Under-five vaccine provision data missing from one facility at baseline and one facility at first followup.

* Immunization area data missing from one facility at baseline and eight facilities at first followup.

Table D4.2: Immunization services provision, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Vaccinates children under five	6	100.0	(54.1 - 100)	11	100	(71.5 - 100)	28	92.9	(76.5 - 99.1)
Immunization area									
Visual and auditory privacy	6	83.3	(35.9 - 99.6)	10	30	(6.7 - 65.2)	28	42.9	(24.5 - 62.8)
Non private area	6	16.7	(0.4 - 64.1)	10	60	(26.2 - 87.8)	28	28.6	(13.2 - 48.7)
Visual privacy only	6	0.0	(0 - 45.9)	10	10	(0.3 - 44.5)	28	3.6	(0.1 - 18.3)
Other	6	0.0	(0 - 45.9)	10	0	(0 - 30.8)	28	3.6	(0.1 - 18.3)
Do not provide service	6	0.0	(0 - 45.9)	10	0	(0 - 30.8)	28	21.4	(8.3 - 41)

* Immunization area data missing from one facility at first followup.

Table D4.3: Immunization services provision, complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Vaccinates children under five	3	100	(29.2 - 100)	3	100	(29.2 - 100)	6	50.0	(11.8 - 88.2)
Immunization area									
Visual and auditory privacy	2	100	(15.8 - 100)	3	100	(29.2 - 100)	6	66.7	(22.3 - 95.7)
Non private area	2	0	(0 - 84.2)	3	0	(0 - 70.8)	6	33.3	(4.3 - 77.7)
Visual privacy only	2	0	(0 - 84.2)	3	0	(0 - 70.8)	6	0.0	(0 - 45.9)
Other	2	0	(0 - 84.2)	3	0	(0 - 70.8)	6	0.0	(0 - 45.9)
Do not provide service	2	0	(0 - 84.2)	3	0	(0 - 70.8)	6	0.0	(0 - 45.9)

* Immunization area data missing from one facility at baseline.

Table D4.4: Vaccine storage, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Stores vaccines	52	78.8	(65.3 - 88.9)	39	64.1	(47.2 - 78.8)	56	69.6	(55.9 - 81.2)
Collected from another health facility	52	9.6	(3.2 - 21)	39	17.9	(7.5 - 33.5)	56	17.9	(8.9 - 30.4)
Delivered when immunization services provided	52	9.6	(3.2 - 21)	39	17.9	(7.5 - 33.5)	56	12.5	(5.2 - 24.1)
Does not store vaccines	52	0.0	(0 - 6.8)	39	0.0	(0 - 9)	56	0.0	(0 - 6.4)

Table D4.5: Vaccine storage, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Stores vaccines	6	100	(54.1 - 100)	11	100	(71.5 - 100)	26	96.2	(80.4 - 99.9)
Collected from another health facility	6	0	(0 - 45.9)	11	0	(0 - 28.5)	26	3.8	(0.1 - 19.6)
Delivered when immunization services provided	6	0	(0 - 45.9)	11	0	(0 - 28.5)	26	0.0	(0 - 13.2)
Does not store vaccines	6	0	(0 - 45.9)	11	0	(0 - 28.5)	26	0.0	(0 - 13.2)

Table D4.6: Vaccine storage, complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Stores vaccines	3	100	(29.2 - 100)	3	100	(29.2 - 100)	3	100	(29.2 - 100)
Collected from another health facility	3	0	(0 - 70.8)	3	0	(0 - 70.8)	3	0	(0 - 70.8)
Delivered when immunization services provided	3	0	(0 - 70.8)	3	0	(0 - 70.8)	3	0	(0 - 70.8)
Does not store vaccines	3	0	(0 - 70.8)	3	0	(0 - 70.8)	3	0	(0 - 70.8)

Table D4.7: Vaccine supply, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Ordering strategy									
Determines own need	41	82.9	(67.9 - 92.8)	25	100	(86.3 - 100)	39	97.4	(86.5 - 99.9)
Need determined elsewhere	41	9.8	(2.7 - 23.1)	25	0	(0 - 13.7)	39	0.0	(0 - 9)
Both (differ by vaccine)	41	4.9	(0.6 - 16.5)	25	0	(0 - 13.7)	39	2.6	(0.1 - 13.5)
Don't know	41	2.4	(0.1 - 12.9)	25	0	(0 - 13.7)	39	0.0	(0 - 9)
Time to receive supplies									
One day	40	85.0	(70.2 - 94.3)	25	88	(68.8 - 97.5)	39	87.2	(72.6 - 95.7)
2 - 7 days	40	12.5	(4.2 - 26.8)	25	12	(2.5 - 31.2)	39	10.3	(2.9 - 24.2)
More than one week	40	2.5	(0.1 - 13.2)	25	0	(0 - 13.7)	39	0.0	(0 - 9)
Reception of quantity ordered									
Always	41	75.6	(59.7 - 87.6)	25	92	(74 - 99)	39	82.1	(66.5 - 92.5)
Almost always	41	24.4	(12.4 - 40.3)	25	4	(0.1 - 20.4)	39	17.9	(7.5 - 33.5)
Almost never	41	0.0	(0 - 8.6)	25	0	(0 - 13.7)	39	0.0	(0 - 9)
Don't Know	41	0.0	(0 - 8.6)	25	4	(0.1 - 20.4)	39	0.0	(0 - 9)

Table D4.8: Vaccine supply, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Ordering strategy									
Determines own need	6	50.0	(11.8 - 88.2)	11	100.0	(71.5 - 100)	25	92	(74 - 99)
Need determined elsewhere	6	50.0	(11.8 - 88.2)	11	0.0	(0 - 28.5)	25	4	(0.1 - 20.4)
Both (differ by vaccine)	6	0.0	(0 - 45.9)	11	0.0	(0 - 28.5)	25	4	(0.1 - 20.4)
Don't know	6	0.0	(0 - 45.9)	11	0.0	(0 - 28.5)	25	0	(0 - 13.7)
Time to receive supplies									
One day	6	66.7	(22.3 - 95.7)	11	100.0	(71.5 - 100)	25	92	(74 - 99)
2 - 7 days	6	33.3	(4.3 - 77.7)	11	0.0	(0 - 28.5)	25	8	(1 - 26)
More than one week	6	0.0	(0 - 45.9)	11	0.0	(0 - 28.5)	25	0	(0 - 13.7)
Reception of quantity ordered									
Always	6	66.7	(22.3 - 95.7)	11	90.9	(58.7 - 99.8)	25	96	(79.6 - 99.9)
Almost always	6	33.3	(4.3 - 77.7)	11	9.1	(0.2 - 41.3)	25	4	(0.1 - 20.4)
Almost never	6	0.0	(0 - 45.9)	11	0.0	(0 - 28.5)	25	0	(0 - 13.7)
Don't Know	6	0.0	(0 - 45.9)	11	0.0	(0 - 28.5)	25	0	(0 - 13.7)

Table D4.9: Vaccine supply, complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Ordering strategy									
Determines own need	3	100	(29.2 - 100)	3	100	(29.2 - 100)	3	100	(29.2 - 100)
Need determined elsewhere	3	0	(0 - 70.8)	3	0	(0 - 70.8)	3	0	(0 - 70.8)
Both (differ by vaccine)	3	0	(0 - 70.8)	3	0	(0 - 70.8)	3	0	(0 - 70.8)
Don't know	3	0	(0 - 70.8)	3	0	(0 - 70.8)	3	0	(0 - 70.8)
Time to receive supplies									
One day	3	100	(29.2 - 100)	3	100	(29.2 - 100)	3	100	(29.2 - 100)
2 - 7 days	3	0	(0 - 70.8)	3	0	(0 - 70.8)	3	0	(0 - 70.8)
More than one week	3	0	(0 - 70.8)	3	0	(0 - 70.8)	3	0	(0 - 70.8)
Reception of quantity ordered									
Always	3	100	(29.2 - 100)	3	100	(29.2 - 100)	3	100	(29.2 - 100)
Almost always	3	0	(0 - 70.8)	3	0	(0 - 70.8)	3	0	(0 - 70.8)
Almost never	3	0	(0 - 70.8)	3	0	(0 - 70.8)	3	0	(0 - 70.8)
Don't Know	3	0	(0 - 70.8)	3	0	(0 - 70.8)	3	0	(0 - 70.8)

Table D4.10: Vaccines observed day of survey, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Pentavalent	38	92.1	(78.6 - 98.3)	25	100	(86.3 - 100)	37	97.3	(85.8 - 99.9)
Polio / IPV	38	84.2	(68.7 - 94)	25	100	(86.3 - 100)	37	97.3	(85.8 - 99.9)
Measles, mumps, rubella	38	89.5	(75.2 - 97.1)	25	100	(86.3 - 100)	37	97.3	(85.8 - 99.9)
Rotavirus	38	89.5	(75.2 - 97.1)	25	100	(86.3 - 100)	37	94.6	(81.8 - 99.3)
Pneumococcal conjugate	38	65.8	(48.6 - 80.4)	25	100	(86.3 - 100)	37	94.6	(81.8 - 99.3)
BCG	38	31.6	(17.5 - 48.7)	25	100	(86.3 - 100)	37	94.6	(81.8 - 99.3)

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

Table D4.11: Vaccines observed day of survey, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Pentavalent	6	100.0	(54.1 - 100)	10	100	(69.2 - 100)	26	100.0	(86.8 - 100)
Polio / IPV	6	100.0	(54.1 - 100)	10	100	(69.2 - 100)	26	100.0	(86.8 - 100)
Measles, mumps, rubella	6	100.0	(54.1 - 100)	10	100	(69.2 - 100)	26	100.0	(86.8 - 100)
Rotavirus	6	83.3	(35.9 - 99.6)	10	100	(69.2 - 100)	26	100.0	(86.8 - 100)
Pneumococcal conjugate	6	33.3	(4.3 - 77.7)	10	90	(55.5 - 99.7)	26	92.3	(74.9 - 99.1)
BCG	6	16.7	(0.4 - 64.1)	10	100	(69.2 - 100)	26	96.2	(80.4 - 99.9)

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

Table D4.12: Vaccines observed day of survey, complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Pentavalent	2	100	(15.8 - 100)	3	100	(29.2 - 100)	3	66.7	(9.4 - 99.2)
Polio / IPV	2	100	(15.8 - 100)	3	100	(29.2 - 100)	3	66.7	(9.4 - 99.2)
Measles, mumps, rubella	2	100	(15.8 - 100)	3	100	(29.2 - 100)	3	66.7	(9.4 - 99.2)
Rotavirus	2	100	(15.8 - 100)	3	100	(29.2 - 100)	3	66.7	(9.4 - 99.2)
Pneumococcal conjugate	2	50	(1.3 - 98.7)	3	100	(29.2 - 100)	3	66.7	(9.4 - 99.2)
BCG	2	0	(0 - 84.2)	3	100	(29.2 - 100)	3	100.0	(29.2 - 100)

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

Table D4.13: Cold chain composite indicator, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
At least one functional refrigerator	41	85.4	(70.8 - 94.4)	22	81.8	(59.7 - 94.8)	32	100.0	(89.1 - 100)
Temperature monitoring chart for each fridge	41	65.9	(49.4 - 79.9)	18	94.4	(72.7 - 99.9)	32	96.9	(83.8 - 99.9)
Temperature recorded twice daily during past 30 days	41	34.1	(20.1 - 50.6)	18	88.9	(65.3 - 98.6)	32	68.8	(50 - 83.9)
Cold chain according to standard	41	34.1	(20.1 - 50.6)	18	88.9	(65.3 - 98.6)	32	68.8	(50 - 83.9)

* At first and second follow-up, only weekdays and non-holidays are evaluated for temperature recording. At baseline, all 30 days are considered.

Table D4.14: Cold chain composite indicator, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
At least one functional refrigerator	6	100.0	(54.1 - 100)	10	90.0	(55.5 - 99.7)	27	100.0	(87.2 - 100)
Temperature monitoring chart for each fridge	6	50.0	(11.8 - 88.2)	9	88.9	(51.8 - 99.7)	27	96.3	(81 - 99.9)
Temperature recorded twice daily during past 30 days	6	33.3	(4.3 - 77.7)	9	88.9	(51.8 - 99.7)	27	85.2	(66.3 - 95.8)
Cold chain according to standard	6	33.3	(4.3 - 77.7)	9	88.9	(51.8 - 99.7)	27	85.2	(66.3 - 95.8)

* At first and second follow-up, only weekdays and non-holidays are evaluated for temperature recording. At baseline, all 30 days are considered.

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Offers family planning services	55	100.0	(93.5 - 100)	45	100.0	(92.1 - 100)	56	100.0	(93.6 - 100)
Family planning area									
Visual and auditory privacy	54	83.3	(70.7 - 92.1)	45	73.3	(58.1 - 85.4)	56	64.3	(50.4 - 76.6)
Non private area	54	14.8	(6.6 - 27.1)	45	17.8	(8 - 32.1)	56	30.4	(18.8 - 44.1)
Visual privacy only	54	0.0	(0 - 6.6)	45	8.9	(2.5 - 21.2)	56	3.6	(0.4 - 12.3)
Other	54	1.9	(0 - 9.9)	45	0.0	(0 - 7.9)	56	1.8	(0 - 9.6)
Do not provide service	54	0.0	(0 - 6.6)	45	0.0	(0 - 7.9)	56	0.0	(0 - 6.4)

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Offers family planning services	6	100	(54.1 - 100)	11	100	(71.5 - 100)	28	89.3	(71.8 - 97.7)
Family planning area									
Visual and auditory privacy	6	100	(54.1 - 100)	11	100	(71.5 - 100)	28	60.7	(40.6 - 78.5)
Non private area	6	0	(0 - 45.9)	11	0	(0 - 28.5)	28	17.9	(6.1 - 36.9)
Visual privacy only	6	0	(0 - 45.9)	11	0	(0 - 28.5)	28	0.0	(0 - 12.3)
Other	6	0	(0 - 45.9)	11	0	(0 - 28.5)	28	3.6	(0.1 - 18.3)
Do not provide service	6	0	(0 - 45.9)	11	0	(0 - 28.5)	28	17.9	(6.1 - 36.9)

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Offers family planning services	3	100	(29.2 - 100)	3	100	(29.2 - 100)	6	100.0	(54.1 - 100)
Family planning area									
Visual and auditory privacy	2	100	(15.8 - 100)	3	100	(29.2 - 100)	6	66.7	(22.3 - 95.7)
Non private area	2	0	(0 - 84.2)	3	0	(0 - 70.8)	6	0.0	(0 - 45.9)
Visual privacy only	2	0	(0 - 84.2)	3	0	(0 - 70.8)	6	0.0	(0 - 45.9)
Other	2	0	(0 - 84.2)	3	0	(0 - 70.8)	6	0.0	(0 - 45.9)
Do not provide service	2	0	(0 - 84.2)	3	0	(0 - 70.8)	6	33.3	(4.3 - 77.7)

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Male condom	54	81.5	(68.6 - 90.7)	45	97.8	(88.2 - 99.9)	55	98.2	(90.3 - 100)
Oral contraceptive pill	54	88.9	(77.4 - 95.8)	45	97.8	(88.2 - 99.9)	55	89.1	(77.8 - 95.9)
Injectable	54	98.1	(90.1 - 100)	45	100.0	(92.1 - 100)	55	90.9	(80 - 97)
All methods observed day of survey	54	75.9	(62.4 - 86.5)	45	95.6	(84.9 - 99.5)	55	85.5	(73.3 - 93.5)
All methods continuously available in past three months	54	63.0	(48.7 - 75.7)	45	86.7	(73.2 - 94.9)	55	78.2	(65 - 88.2)
Family planning services according to standard	54	63.0	(48.7 - 75.7)	45	86.7	(73.2 - 94.9)	55	78.2	(65 - 88.2)

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Male condom	6	83.3	(35.9 - 99.6)	11	100.0	(71.5 - 100)	23	91.3	(72 - 98.9)
Oral contraceptive pill	6	66.7	(22.3 - 95.7)	11	100.0	(71.5 - 100)	23	87.0	(66.4 - 97.2)
Injectable	6	100.0	(54.1 - 100)	11	100.0	(71.5 - 100)	23	91.3	(72 - 98.9)
Intrauterine device	6	83.3	(35.9 - 99.6)	11	100.0	(71.5 - 100)	23	95.7	(78.1 - 99.9)
All methods observed day of survey	6	66.7	(22.3 - 95.7)	11	100.0	(71.5 - 100)	23	87.0	(66.4 - 97.2)
All methods continuously available in past three months	6	66.7	(22.3 - 95.7)	11	90.9	(58.7 - 99.8)	23	60.9	(38.5 - 80.3)
Family planning services according to standard	6	66.7	(22.3 - 95.7)	11	90.9	(58.7 - 99.8)	23	60.9	(38.5 - 80.3)

* IUD three-month stock not captured at baseline.

† IUD kardex not captured at first follow-up.

Table D5.6: Family planning methods observed, complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Male condom	2	100	(15.8 - 100)	3	100.0	(29.2 - 100)	4	75	(19.4 - 99.4)
Oral contraceptive pill	2	50	(1.3 - 98.7)	3	100.0	(29.2 - 100)	4	75	(19.4 - 99.4)
Injectable	2	100	(15.8 - 100)	3	100.0	(29.2 - 100)	4	75	(19.4 - 99.4)
Implant	2	0	(0 - 84.2)	-	-	-	4	0	(0 - 60.2)
Intrauterine device	2	50	(1.3 - 98.7)	3	100.0	(29.2 - 100)	4	75	(19.4 - 99.4)
IUD insertion equipment	-	-	-	3	100.0	(29.2 - 100)	4	75	(19.4 - 99.4)
Equipment for tubal ligation	2	0	(0 - 84.2)	3	66.7	(9.4 - 99.2)	4	50	(6.8 - 93.2)
Equipment for vasectomy	2	0	(0 - 84.2)	3	66.7	(9.4 - 99.2)	4	25	(0.6 - 80.6)
Other contraceptive	2	0	(0 - 84.2)	3	33.3	(0.8 - 90.6)	4	0	(0 - 60.2)

Table D5.7: Postpartum contraception administration, uncomplicated deliveries in past two years at basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Received appropriate contraception:	38	31.6	(17.5 - 48.7)	67	82.1	(70.8 - 90.4)	136	86.0	(79 - 91.4)
Condom	35	0.0	(0 - 10)	57	1.8	(0 - 9.4)	136	2.9	(0.8 - 7.4)
Injectable	35	28.6	(14.6 - 46.3)	57	68.4	(54.8 - 80.1)	136	77.9	(70 - 84.6)
Intrauterine device	35	2.9	(0.1 - 14.9)	57	19.3	(10 - 31.9)	124	1.6	(0.2 - 5.7)
Tubal ligation	35	2.9	(0.1 - 14.9)	57	8.8	(2.9 - 19.3)	124	4.0	(1.3 - 9.2)

Table D5.8: Postpartum contraception administration, uncomplicated deliveries in past two years at complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Received appropriate contraception:	11	81.8	(48.2 - 97.7)	12	66.7	(34.9 - 90.1)	43	90.7	(77.9 - 97.4)
Condom	10	20.0	(2.5 - 55.6)	8	12.5	(0.3 - 52.7)	43	9.3	(2.6 - 22.1)
Injectable	10	50.0	(18.7 - 81.3)	8	100.0	(63.1 - 100)	43	69.8	(53.9 - 82.8)
Intrauterine device	10	10.0	(0.3 - 44.5)	8	0.0	(0 - 36.9)	41	2.4	(0.1 - 12.9)
Tubal ligation	10	20.0	(2.5 - 55.6)	8	0.0	(0 - 36.9)	41	9.8	(2.7 - 23.1)

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Offers antenatal care services	55	100.0	(93.5 - 100)	45	100.0	(92.1 - 100)	56	100.0	(93.6 - 100)
Visual and auditory privacy	54	94.4	(84.6 - 98.8)	46	69.6	(54.2 - 82.3)	56	71.4	(57.8 - 82.7)
Visual privacy only	54	1.9	(0 - 9.9)	46	10.9	(3.6 - 23.6)	56	10.7	(4 - 21.9)
Non private area	54	3.7	(0.5 - 12.7)	46	17.4	(7.8 - 31.4)	56	17.9	(8.9 - 30.4)
Other	54	0.0	(0 - 6.6)	46	0.0	(0 - 7.7)	56	0.0	(0 - 6.4)
Do not provide service	54	0.0	(0 - 6.6)	46	2.2	(0.1 - 11.5)	56	0.0	(0 - 6.4)

* Antenatal care service provision data missing from one facility at at first follow-up.

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Offers antenatal care services	6	100	(54.1 - 100)	11	100.0	(71.5 - 100)	28	75.0	(55.1 - 89.3)
Visual and auditory privacy	6	100	(54.1 - 100)	11	90.9	(58.7 - 99.8)	28	89.3	(71.8 - 97.7)
Visual privacy only	6	0	(0 - 45.9)	11	0.0	(0 - 28.5)	28	0.0	(0 - 12.3)
Non private area	6	0	(0 - 45.9)	11	9.1	(0.2 - 41.3)	28	7.1	(0.9 - 23.5)
Other	6	0	(0 - 45.9)	11	0.0	(0 - 28.5)	28	0.0	(0 - 12.3)
Do not provide service	6	0	(0 - 45.9)	11	0.0	(0 - 28.5)	28	3.6	(0.1 - 18.3)
Offers (non-urgent) delivery services	6	100	(54.1 - 100)	11	100.0	(71.5 - 100)	28	92.9	(76.5 - 99.1)
Visual and auditory privacy	6	100	(54.1 - 100)	11	100.0	(71.5 - 100)	28	85.7	(67.3 - 96)
Visual privacy only	6	0	(0 - 45.9)	11	0.0	(0 - 28.5)	28	3.6	(0.1 - 18.3)
Non private area	6	0	(0 - 45.9)	11	0.0	(0 - 28.5)	28	3.6	(0.1 - 18.3)
Other	6	0	(0 - 45.9)	11	0.0	(0 - 28.5)	28	0.0	(0 - 12.3)
Do not provide service	6	0	(0 - 45.9)	11	0.0	(0 - 28.5)	28	7.1	(0.9 - 23.5)

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Offers antenatal care services	3	66.7	(9.4 - 99.2)	3	33.3	(0.8 - 90.6)	6	66.7	(22.3 - 95.7)
Visual and auditory privacy	2	100.0	(15.8 - 100)	3	100.0	(29.2 - 100)	6	83.3	(35.9 - 99.6)
Visual privacy only	2	0.0	(0 - 84.2)	3	0.0	(0 - 70.8)	6	0.0	(0 - 45.9)
Non private area	2	0.0	(0 - 84.2)	3	0.0	(0 - 70.8)	6	16.7	(0.4 - 64.1)
Other	2	0.0	(0 - 84.2)	3	0.0	(0 - 70.8)	6	0.0	(0 - 45.9)
Do not provide service	2	0.0	(0 - 84.2)	3	0.0	(0 - 70.8)	6	0.0	(0 - 45.9)
Offers (non-urgent) delivery services	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	6	100.0	(54.1 - 100)
Visual and auditory privacy	2	100.0	(15.8 - 100)	3	100.0	(29.2 - 100)	6	100.0	(54.1 - 100)
Visual privacy only	2	0.0	(0 - 84.2)	3	0.0	(0 - 70.8)	6	0.0	(0 - 45.9)
Non private area	2	0.0	(0 - 84.2)	3	0.0	(0 - 70.8)	6	0.0	(0 - 45.9)
Other	2	0.0	(0 - 84.2)	3	0.0	(0 - 70.8)	6	0.0	(0 - 45.9)
Do not provide service	2	0.0	(0 - 84.2)	3	0.0	(0 - 70.8)	6	0.0	(0 - 45.9)

* Antenatal care and delivery area data missing from one facility at baseline.

Table D6.4: ANC and PPC equipment observed and functional, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Standing scale with height rod	54	85.2	(72.9 - 93.4)	45	97.8	(88.2 - 99.9)	56	98.2	(90.4 - 100)
Gynecological table	54	90.7	(79.7 - 96.9)	45	97.8	(88.2 - 99.9)	56	96.4	(87.7 - 99.6)
Lamp	54	46.3	(32.6 - 60.4)	45	82.2	(67.9 - 92)	56	78.6	(65.6 - 88.4)
CLAP / measuring tape	54	85.2	(72.9 - 93.4)	45	100.0	(92.1 - 100)	56	100.0	(93.6 - 100)
Sphygmomanometer	54	83.3	(70.7 - 92.1)	45	97.8	(88.2 - 99.9)	56	98.2	(90.4 - 100)
Stethoscope	54	87.0	(75.1 - 94.6)	45	97.8	(88.2 - 99.9)	56	100.0	(93.6 - 100)
Pregnancy wheel	54	87.0	(75.1 - 94.6)	45	95.6	(84.9 - 99.5)	56	92.9	(82.7 - 98)
All ANC/PPC equipment observed and functional	54	25.9	(15 - 39.7)	45	75.6	(60.5 - 87.1)	56	71.4	(57.8 - 82.7)

Table D6.5: ANC and PPC equipment observed and functional, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Standing scale with height rod	6	66.7	(22.3 - 95.7)	11	100.0	(71.5 - 100)	27	85.2	(66.3 - 95.8)
Gynecological table	6	100.0	(54.1 - 100)	11	100.0	(71.5 - 100)	27	100.0	(87.2 - 100)
Lamp	6	83.3	(35.9 - 99.6)	11	90.9	(58.7 - 99.8)	27	96.3	(81 - 99.9)
CLAP / measuring tape	6	33.3	(4.3 - 77.7)	11	100.0	(71.5 - 100)	27	100.0	(87.2 - 100)
Sphygmomanometer	6	100.0	(54.1 - 100)	11	100.0	(71.5 - 100)	27	92.6	(75.7 - 99.1)
Stethoscope	6	100.0	(54.1 - 100)	11	100.0	(71.5 - 100)	27	96.3	(81 - 99.9)
Pregnancy wheel	6	16.7	(0.4 - 64.1)	11	100.0	(71.5 - 100)	27	85.2	(66.3 - 95.8)
Intrauterine device kit	6	33.3	(4.3 - 77.7)	11	100.0	(71.5 - 100)	27	92.6	(75.7 - 99.1)
All ANC/PPC equipment observed and functional	6	0.0	(0 - 45.9)	11	90.9	(58.7 - 99.8)	27	66.7	(46 - 83.5)

Table D6.6: ANC and PPC laboratory inputs, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Rapid HIV test	6	33.3	(4.3 - 77.7)	11	100.0	(71.5 - 100)	27	92.6	(75.7 - 99.1)
Rapid syphilis test	6	66.7	(22.3 - 95.7)	11	90.9	(58.7 - 99.8)	27	77.8	(57.7 - 91.4)
Serological mixer	-	-	-	11	100.0	(71.5 - 100)	27	85.2	(66.3 - 95.8)
Urine analysis	-	-	-	11	100.0	(71.5 - 100)	27	88.9	(70.8 - 97.6)
Glucose test	6	100.0	(54.1 - 100)	11	100.0	(71.5 - 100)	27	96.3	(81 - 99.9)
Blood test equipment	-	-	-	11	100.0	(71.5 - 100)	27	100.0	(87.2 - 100)
Microscope	-	-	-	11	100.0	(71.5 - 100)	27	100.0	(87.2 - 100)
Automated cell counter	6	83.3	(35.9 - 99.6)	11	100.0	(71.5 - 100)	27	100.0	(87.2 - 100)
All lab inputs observed	6	0.0	(0 - 45.9)	11	100.0	(71.5 - 100)	27	74.1	(53.7 - 88.9)

* Serological mixer, urine analysis, blood analysis equipment, and microscope not captured at baseline.

Table D6.7: ANC and PPC composite indicator, ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
All ANC/PPC equipment observed and functional	54	25.9	(15 - 39.7)	45	75.6	(60.5 - 87.1)	56	71.4	(57.8 - 82.7)
ANC/PPC according to standard	54	25.9	(15 - 39.7)	45	75.6	(60.5 - 87.1)	56	71.4	(57.8 - 82.7)

Table D6.8: ANC and PPC composite indicator, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
All ANC/PPC equipment observed and functional	6	0	(0 - 45.9)	11	90.9	(58.7 - 99.8)	27	66.7	(46 - 83.5)
All lab inputs observed	6	0	(0 - 45.9)	11	100.0	(71.5 - 100)	27	74.1	(53.7 - 88.9)
ANC/PPC according to standard	6	0	(0 - 45.9)	11	90.9	(58.7 - 99.8)	27	48.1	(28.7 - 68.1)

Table D6.9: ANC timeliness, medical records from ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
First ANC visit within 12 weeks	176	38.6	(31.4 - 46.3)	371	29.9	(25.3 - 34.9)	567	52.9	(48.7 - 57.1)

* At baseline, this indicator was calculated using records from ambulatory and basic facilities. Current value reflects only ambulatory baseline facilities for comparability.

Figure D6.1: Histogram comparison of first ANC visit across rounds

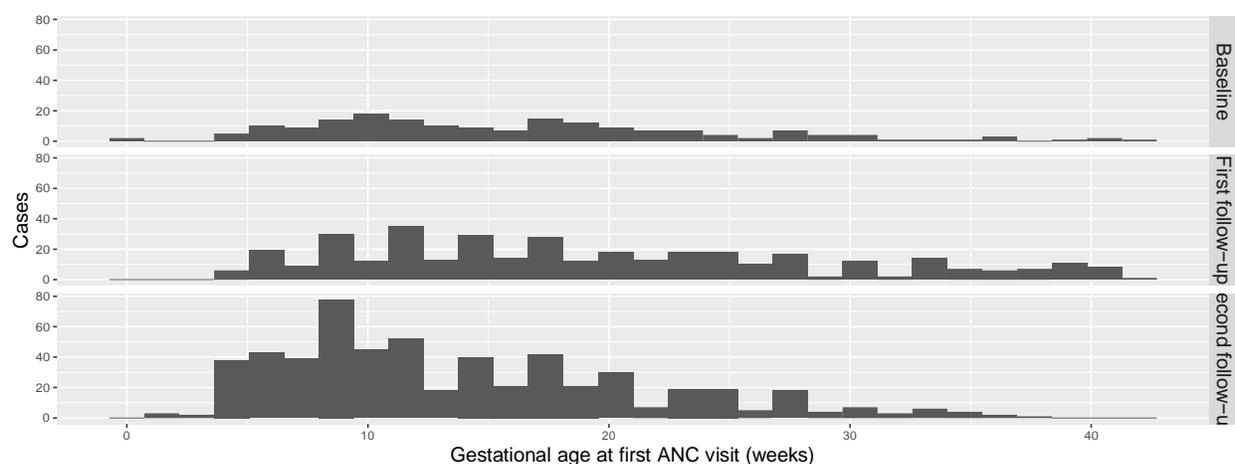


Table D6.10: At least four ANC visits to standard, medical records from ambulatory facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
At least four ANC visits	182	61.5	(54.1 - 68.6)	386	30.1	(25.5 - 34.9)	576	41.0	(36.9 - 45.1)
All appropriate checks performed at at least four ANC visits	182	60.4	(52.9 - 67.6)	386	28.2	(23.8 - 33)	576	34.7	(30.8 - 38.8)
All lab tests performed at least once during pregnancy:	182	53.8	(46.3 - 61.2)	386	71.5	(66.7 - 76)	576	20.1	(16.9 - 23.7)
Blood group	182	79.7	(73.1 - 85.3)	386	78.8	(74.3 - 82.7)	576	44.3	(40.2 - 48.4)
Rh factor	182	78.6	(71.9 - 84.3)	386	78.5	(74.1 - 82.5)	576	44.3	(40.2 - 48.4)
Blood glucose	182	61.0	(53.5 - 68.1)	386	76.7	(72.1 - 80.8)	576	37.7	(33.7 - 41.8)
HIV test	-	-	-	386	90.9	(87.6 - 93.6)	576	46.7	(42.6 - 50.9)
Syphilis test (VDRL / RPR*)	182	76.9	(70.1 - 82.8)	386	74.9	(70.2 - 79.1)	576	37.7	(33.7 - 41.8)
Hemoglobin	182	73.1	(66 - 79.4)	386	76.9	(72.4 - 81.1)	576	34.4	(30.5 - 38.4)
Urinalysis	182	81.3	(74.9 - 86.7)	386	86.3	(82.4 - 89.5)	576	39.8	(35.7 - 43.9)
Antenatal care performed according to standard	182	32.4	(25.7 - 39.7)	386	19.4	(15.6 - 23.7)	576	10.8	(8.4 - 13.6)

* RPR not captured as alternative to VDRL at baseline or first follow-up.

† HIV test not captured at baseline.

* At baseline, fetal heart rate, fetal movement, and uterine height data only captured if first visit <= 20 weeks gestational age.

Table D6.11: At least four ANC visits to standard, medical records from basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
At least four ANC visits	32	46.9	(29.1 - 65.3)	96	34.4	(25 - 44.8)	117	55.6	(46.1 - 64.7)
All appropriate checks performed at at least four ANC visits	32	46.9	(29.1 - 65.3)	96	31.2	(22.2 - 41.5)	117	50.4	(41 - 59.8)
All lab tests performed at least once during pregnancy:	32	50.0	(31.9 - 68.1)	96	76.0	(66.3 - 84.2)	117	36.8	(28 - 46.2)
Blood group	32	93.8	(79.2 - 99.2)	96	88.5	(80.4 - 94.1)	117	67.5	(58.2 - 75.9)
Rh factor	32	90.6	(75 - 98)	96	88.5	(80.4 - 94.1)	117	67.5	(58.2 - 75.9)
Blood glucose	32	90.6	(75 - 98)	96	77.1	(67.4 - 85)	117	56.4	(46.9 - 65.6)
HIV test	-	-	-	96	92.7	(85.6 - 97)	117	63.2	(53.8 - 72)
Syphilis test (VDRL / RPR*)	32	81.2	(63.6 - 92.8)	96	84.4	(75.5 - 91)	117	61.5	(52.1 - 70.4)
Hemoglobin	32	65.6	(46.8 - 81.4)	96	85.4	(76.7 - 91.8)	117	53.0	(43.5 - 62.3)
Urinalysis	32	75.0	(56.6 - 88.5)	96	90.6	(82.9 - 95.6)	117	56.4	(46.9 - 65.6)
Antenatal care performed according to standard	32	31.2	(16.1 - 50)	96	22.9	(15 - 32.6)	117	29.1	(21 - 38.2)

* RPR not captured as alternative to VDRL at baseline or first follow-up.

† HIV test not captured at baseline.

‡ At baseline, fetal heart rate, fetal movement, and uterine height data only captured if first visit <= 20 weeks gestational age.

Table D6.12: Active management of third stage of labor, medical records from basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Oxytocin administered	78	96.2	(89.2 - 99.2)	164	80.5	(73.6 - 86.3)	325	96.0	(93.3 - 97.9)
Other uterotonic administered	78	2.6	(0.3 - 9)	140	2.1	(0.4 - 6.1)	325	0.6	(0.1 - 2.2)
Active management of third stage of labor according to standard	78	80.8	(70.3 - 88.8)	164	68.3	(60.6 - 75.3)	325	91.1	(87.4 - 93.9)

Table D6.13: Active management of third stage of labor, medical records from complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Oxytocin administered	24	95.8	(78.9 - 99.9)	46	89.1	(76.4 - 96.4)	122	91.8	(85.4 - 96)
Other uterotonic administered	24	4.2	(0.1 - 21.1)	46	0.0	(0 - 7.7)	122	0.0	(0 - 3)
Active management of third stage of labor according to standard	24	95.8	(78.9 - 99.9)	46	52.2	(36.9 - 67.1)	122	77.0	(68.6 - 84.2)

Table D6.14: Partograph revision, medical records from basic facilities

	First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI
Imminent birth or elective C-section	171	66.1	(58.5 - 73.1)	325	74.8	(69.7 - 79.4)
Partograph included and filled out	171	61.4	(53.7 - 68.7)	325	85.8	(81.6 - 89.4)
If partograph filled out:						
Dilation > 4.5cm	105	67.6	(57.8 - 76.4)	279	44.4	(38.5 - 50.5)
Fetal heart rate and alert curve recorded if dilation > 4.5cm	71	98.6	(92.4 - 100)	124	98.4	(94.3 - 99.8)
Alert curve surpassed	105	11.4	(6 - 19.1)	279	14.0	(10.1 - 18.6)
Note exists within 30 minutes if alert curve surpassed	12	58.3	(27.7 - 84.8)	39	69.2	(52.4 - 83)
Fetal heart rate < 120 bpm	105	4.8	(1.6 - 10.8)	279	1.1	(0.2 - 3.1)
Note exists within 30 minutes if fetal heart rate < 120 bpm	5	20.0	(0.5 - 71.6)	3	0.0	(0 - 70.8)
Partograph revised according to standard	172	91.3	(86 - 95)	325	93.5	(90.3 - 96)

Table D6.15: Partograph revision, medical records from complete facilities

	First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI
Imminent birth or elective C-section	49	100.0	(92.7 - 100)	122	87.7	(80.5 - 93)
Partograph included and filled out	49	55.1	(40.2 - 69.3)	122	75.4	(66.8 - 82.8)
If partograph filled out:						
Dilation > 4.5cm	27	77.8	(57.7 - 91.4)	92	60.9	(50.1 - 70.9)
Fetal heart rate and alert curve recorded if dilation > 4.5cm	21	95.2	(76.2 - 99.9)	56	98.2	(90.4 - 100)
Alert curve surpassed	27	0.0	(0 - 12.8)	92	25.0	(16.6 - 35.1)
Note exists within 30 minutes if alert curve surpassed	-	-	-	23	95.7	(78.1 - 99.9)
Fetal heart rate < 120 bpm	27	0.0	(0 - 12.8)	92	1.1	(0 - 5.9)
Note exists within 30 minutes if fetal heart rate < 120 bpm	-	-	-	1	0.0	(0 - 97.5)
Partograph revised according to standard	49	98.0	(89.1 - 99.9)	122	89.3	(82.5 - 94.2)

Table D6.16: Maternal immediate postpartum care, medical records from basic facilities

	First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI
Checked four times in first two hours:						
Blood pressure	121	78.5	(70.1 - 85.5)	285	86.3	(81.8 - 90.1)
Temperature	121	68.6	(59.5 - 76.7)	285	86.3	(81.8 - 90.1)
Heart rate / pulse	121	68.6	(59.5 - 76.7)	285	83.2	(78.3 - 87.3)
All checks at discharge	121	86.0	(78.5 - 91.6)	285	86.0	(81.4 - 89.8)
Immediate maternal PPC to standard	121	62.0	(52.7 - 70.7)	285	73.7	(68.2 - 78.7)

Table D6.17: Maternal immediate postpartum care, medical records from complete facilities

	First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI
Checked four times in first two hours:						
Blood pressure	45	26.7	(14.6 - 41.9)	99	100.0	(96.3 - 100)
Temperature	45	0.0	(0 - 7.9)	99	100.0	(96.3 - 100)
Heart rate / pulse	45	0.0	(0 - 7.9)	99	100.0	(96.3 - 100)
All checks at discharge	45	88.9	(75.9 - 96.3)	99	87.9	(79.8 - 93.6)
Immediate maternal PPC to standard	45	0.0	(0 - 7.9)	99	87.9	(79.8 - 93.6)

Table D6.18: Immediate neonate postpartum care, medical records from basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Vitamin K	62	95.2	(86.5 - 99)	135	98.5	(94.8 - 99.8)	286	91.3	(87.4 - 94.3)
Application of prophylaxis with oxytetracycline ophthalmic/chloramphenicol	62	91.9	(82.2 - 97.3)	135	98.5	(94.8 - 99.8)	286	90.9	(87 - 94)
Curing the umbilical cord with water and chlorhexidine	62	77.4	(65 - 87.1)	135	94.8	(89.6 - 97.9)	286	68.5	(62.8 - 73.9)
Evaluation for the presence of malformations	62	91.9	(82.2 - 97.3)	135	92.6	(86.8 - 96.4)	286	85.7	(81.1 - 89.5)
BCG vaccine	62	71.0	(58.1 - 81.8)	135	89.6	(83.2 - 94.2)	286	85.0	(80.3 - 88.9)
APGAR score (1 or 5 minutes)	62	100.0	(94.2 - 100)	135	100.0	(97.3 - 100)	286	94.1	(90.7 - 96.5)
Respiratory rate	62	19.4	(10.4 - 31.4)	135	74.8	(66.6 - 81.9)	286	56.6	(50.7 - 62.5)
Weight	62	96.8	(88.8 - 99.6)	135	99.3	(95.9 - 100)	286	93.4	(89.8 - 96)
Height	62	95.2	(86.5 - 99)	135	91.1	(85 - 95.3)	286	93.0	(89.4 - 95.7)
Head circumference	62	85.5	(74.2 - 93.1)	135	91.1	(85 - 95.3)	286	92.7	(89 - 95.4)
Immediate neonate PPC to standard	62	6.5	(1.8 - 15.7)	135	63.7	(55 - 71.8)	286	40.9	(35.2 - 46.9)

Table D6.19: Immediate neonate postpartum care, medical records from complete facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Vitamin K	19	100.0	(82.4 - 100)	49	100.0	(92.7 - 100)	113	92.9	(86.5 - 96.9)
Application of prophylaxis with oxytetracycline ophthalmic/chloramphenicol	19	94.7	(74 - 99.9)	49	100.0	(92.7 - 100)	113	92.0	(85.4 - 96.3)
Curing the umbilical cord with water and chlorhexidine	19	10.5	(1.3 - 33.1)	49	100.0	(92.7 - 100)	113	61.9	(52.3 - 70.9)
Evaluation for the presence of malformations	19	100.0	(82.4 - 100)	49	95.9	(86 - 99.5)	113	92.0	(85.4 - 96.3)
BCG vaccine	19	94.7	(74 - 99.9)	49	91.8	(80.4 - 97.7)	113	90.3	(83.2 - 95)
APGAR score (1 or 5 minutes)	19	100.0	(82.4 - 100)	49	100.0	(92.7 - 100)	113	94.7	(88.8 - 98)
Respiratory rate	19	36.8	(16.3 - 61.6)	49	87.8	(75.2 - 95.4)	113	56.6	(47 - 65.9)
Weight	19	94.7	(74 - 99.9)	49	98.0	(89.1 - 99.9)	113	88.5	(81.1 - 93.7)
Height	19	94.7	(74 - 99.9)	49	95.9	(86 - 99.5)	113	85.8	(78 - 91.7)
Head circumference	19	94.7	(74 - 99.9)	49	91.8	(80.4 - 97.7)	113	85.8	(78 - 91.7)
Immediate neonate PPC to standard	19	5.3	(0.1 - 26)	49	79.6	(65.7 - 89.8)	113	37.2	(28.3 - 46.8)

Table D6.20: Sociocultural adaptability, centros de salud

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Services adapt to sociocultural conditions	6	66.7	(22.3 - 95.7)	7	71.4	(29 - 96.3)	11	81.8	(48.2 - 97.7)

Table D7.1: Emergency care provision, second follow-up evaluation

	Basic Facilities			Complete Facilities		
	N	%	CI	N	%	CI
Emergency care room / area						
Visual and auditory privacy	26	84.6	(65.1 - 95.6)	6	100	(54.1 - 100)
Visual privacy only	26	3.8	(0.1 - 19.6)	6	0	(0 - 45.9)
Non-private area	26	11.5	(2.4 - 30.2)	6	0	(0 - 45.9)
Other	26	0.0	(0 - 13.2)	6	0	(0 - 45.9)
Do not provide service	26	0.0	(0 - 13.2)	6	0	(0 - 45.9)

* Emergency care area data not captured at baseline and first follow-up evaluations.

† Facilities which had no delivery care area were not asked about emergency care area.

Table D7.2: Emergency care composite indicator, basic facilities

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Dexamethasone	6	100.0	(54.1 - 100)	11	100.0	(71.5 - 100)	26	100.0	(86.8 - 100)
Antibiotics	6	100.0	(54.1 - 100)	11	100.0	(71.5 - 100)	26	100.0	(86.8 - 100)
Gentamicin	6	83.3	(35.9 - 99.6)	11	100.0	(71.5 - 100)	26	96.2	(80.4 - 99.9)
Magnesium sulfate	6	83.3	(35.9 - 99.6)	11	100.0	(71.5 - 100)	26	96.2	(80.4 - 99.9)
Hydralazine	6	83.3	(35.9 - 99.6)	11	100.0	(71.5 - 100)	26	100.0	(86.8 - 100)
Ergobasin / ergonovine maleate / ergometrine / oxytocin	6	100.0	(54.1 - 100)	11	100.0	(71.5 - 100)	26	100.0	(86.8 - 100)
All drugs observed day of survey	6	66.7	(22.3 - 95.7)	11	100.0	(71.5 - 100)	26	92.3	(74.9 - 99.1)
All drugs continuously available in past three months	6	50.0	(11.8 - 88.2)	11	90.9	(58.7 - 99.8)	26	61.5	(40.6 - 79.8)
Emergency care according to standard	6	50.0	(11.8 - 88.2)	11	90.9	(58.7 - 99.8)	26	61.5	(40.6 - 79.8)

* Kardex data and three month-stock data not captured for all drugs at baseline evaluation.

Table D7.3: Uterine tamponade balloon for hemorrhage management, second follow-up evaluation

	Basic Facilities			Complete Facilities		
	N	%	CI	N	%	CI
Facility uses tamponade to managed obstetric hemorrhage	20	25	(8.7 - 49.1)	3	66.7	(9.4 - 99.2)
Type						
Bakri	5	0	(0 - 52.2)	2	50.0	(1.3 - 98.7)
Foley catheter	5	80	(28.4 - 99.5)	2	0.0	(0 - 84.2)
Condom-based balloon	5	20	(0.5 - 71.6)	2	0.0	(0 - 84.2)
Do not know	5	0	(0 - 52.2)	2	50.0	(1.3 - 98.7)
Assembly kit						
Facility has tamponade kit	5	100	(47.8 - 100)	2	100.0	(15.8 - 100)
Kit commercially assembled	5	40	(5.3 - 85.3)	2	100.0	(15.8 - 100)
Kit prepared from available materials	5	60	(14.7 - 94.7)	2	0.0	(0 - 84.2)
Staff training						
Staff trained in tamponade use	20	60	(36.1 - 80.9)	3	100.0	(29.2 - 100)
Staff trained in tamponade assembly	20	50	(27.2 - 72.8)	3	100.0	(29.2 - 100)

Table D7.4: Distribution of obstetric complications, basic facilities

	Baseline	Second Follow-up
Sepsis	26	45
Hemorrhage	61	129
Pre-eclampsia	34	115
Eclampsia	3	8

Table D7.5: Distribution of obstetric complications, complete facilities

	Baseline	Second Follow-up
Sepsis	13	12
Hemorrhage	60	35
Pre-eclampsia	65	79
Eclampsia	8	6

Table D7.6: Distribution of neonatal complications, basic facilities

	Baseline	Second Follow-up
Sepsis	98	204
Low birth weight	32	44
Asphyxia	18	37
Prematurity	2	8

Table D7.7: Distribution of neonatal complications, complete facilities

	Baseline	Second Follow-up
Sepsis	50	34
Low birth weight	28	42
Asphyxia	47	36
Prematurity	9	18

Table D7.8: Maternal sepsis management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	26	96.15	(80.36 - 99.9)	45	95.56	(84.85 - 99.46)
Pulse / heart rate	26	100.00	(86.77 - 100)	45	97.78	(88.23 - 99.94)
Blood pressure	26	100.00	(86.77 - 100)	45	97.78	(88.23 - 99.94)
Temperature	26	96.15	(80.36 - 99.9)	45	100.00	(92.13 - 100)
Antibiotics administered	26	92.31	(74.87 - 99.05)	45	97.78	(88.23 - 99.94)
Causes treated appropriately	10	70.00	(34.75 - 93.33)	16	81.25	(54.35 - 95.95)
Neonatal sepsis managed according to SMI standard	26	80.77	(60.65 - 93.45)	45	86.67	(73.21 - 94.95)

Table D7.9: Maternal sepsis management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	13	100.00	(75.29 - 100)	12	100.00	(73.54 - 100)
Pulse / heart rate	13	100.00	(75.29 - 100)	12	100.00	(73.54 - 100)
Blood pressure	13	100.00	(75.29 - 100)	12	100.00	(73.54 - 100)
Temperature	13	100.00	(75.29 - 100)	12	100.00	(73.54 - 100)
Lab tests	13	46.15	(19.22 - 74.87)	12	50.00	(21.09 - 78.91)
Complete blood test	13	30.77	(9.09 - 61.43)	12	50.00	(21.09 - 78.91)
Leukocyte count	13	84.62	(54.55 - 98.08)	12	91.67	(61.52 - 99.79)
Platelet count	13	46.15	(19.22 - 74.87)	12	83.33	(51.59 - 97.91)
Hemoglobin	13	38.46	(13.86 - 68.42)	12	25.00	(5.49 - 57.19)
Hematocrit	13	84.62	(54.55 - 98.08)	12	91.67	(61.52 - 99.79)
Antibiotics administered	13	100.00	(75.29 - 100)	12	91.67	(61.52 - 99.79)
Causes treated appropriately	9	100.00	(66.37 - 100)	8	75.00	(34.91 - 96.81)
Neonatal sepsis managed according to SMI standard	13	46.15	(19.22 - 74.87)	12	41.67	(15.17 - 72.33)

Table D7.10: Maternal hemorrhage management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	61	93.44	(84.05 - 98.18)	129	95.35	(90.15 - 98.27)
Pulse / heart rate	61	93.44	(84.05 - 98.18)	129	96.90	(92.25 - 99.15)
Blood pressure	61	98.36	(91.2 - 99.96)	129	96.90	(92.25 - 99.15)
Ringer's lactate / Hartmann's / saline solution administered	61	83.61	(71.91 - 91.85)	129	82.95	(75.33 - 88.99)
Causes treated appropriately	35	77.14	(59.86 - 89.58)	69	66.67	(54.29 - 77.56)
Hemorrhage managed according to SMI standard	61	77.05	(64.5 - 86.85)	129	68.99	(60.25 - 76.84)

Table D7.11: Maternal hemorrhage management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	60	100.00	(94.04 - 100)	35	91.43	(76.94 - 98.2)
Pulse / heart rate	60	100.00	(94.04 - 100)	35	97.14	(85.08 - 99.93)
Blood pressure	60	100.00	(94.04 - 100)	35	94.29	(80.84 - 99.3)
Lab tests	60	15.00	(7.1 - 26.57)	35	42.86	(26.32 - 60.65)
Hematocrit	60	83.33	(71.48 - 91.71)	35	91.43	(76.94 - 98.2)
Hemoglobin	60	15.00	(7.1 - 26.57)	35	42.86	(26.32 - 60.65)
Platelet count	60	75.00	(62.14 - 85.28)	35	85.71	(69.74 - 95.19)
Ringer's lactate / Hartmann's / saline solution administered	60	91.67	(81.61 - 97.24)	35	82.86	(66.35 - 93.44)
Causes treated appropriately	25	92.00	(73.97 - 99.02)	24	79.17	(57.85 - 92.87)
Hemorrhage managed according to SMI standard	60	13.33	(5.94 - 24.59)	35	31.43	(16.85 - 49.29)

Table D7.12: Maternal pre-eclampsia management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	34	97.06	(84.67 - 99.93)	115	95.65	(90.15 - 98.57)
Pulse / heart rate	34	100.00	(89.72 - 100)	115	96.52	(91.33 - 99.04)
Blood pressure	34	100.00	(89.72 - 100)	115	97.39	(92.57 - 99.46)
Respiratory rate	34	97.06	(84.67 - 99.93)	115	96.52	(91.33 - 99.04)
Lab tests	34	58.82	(40.7 - 75.35)	115	64.35	(54.88 - 73.06)
Urine protein	34	58.82	(40.7 - 75.35)	115	64.35	(54.88 - 73.06)
All appropriate medications administered	34	50.00	(32.43 - 67.57)	115	51.30	(41.81 - 60.73)
Magnesium sulfate	34	50.00	(32.43 - 67.57)	115	53.04	(43.51 - 62.41)
Hydralazine / labetalol / nifedipine (if diastolic blood pressure > 110 at first checkup)	7	85.71	(42.13 - 99.64)	22	86.36	(65.09 - 97.09)
Referred to complete facility	34	32.35	(17.39 - 50.53)	115	26.09	(18.34 - 35.1)
Pre-eclampsia managed according to SMI standard	34	14.71	(4.95 - 31.06)	115	16.52	(10.25 - 24.59)

Table D7.13: Maternal pre-eclampsia management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	65	64.62	(51.77 - 76.08)	79	51.90	(40.36 - 63.29)
Pulse / heart rate	65	100.00	(94.48 - 100)	79	100.00	(95.44 - 100)
Blood pressure	65	98.46	(91.72 - 99.96)	79	100.00	(95.44 - 100)
Respiratory rate	65	100.00	(94.48 - 100)	79	98.73	(93.15 - 99.97)
Patellar reflex	65	64.62	(51.77 - 76.08)	79	53.16	(41.6 - 64.49)
Lab tests	65	9.23	(3.46 - 19.02)	79	11.39	(5.34 - 20.53)
Urine protein	65	67.69	(54.95 - 78.77)	79	69.62	(58.25 - 79.47)
Platelet count	65	76.92	(64.81 - 86.47)	79	86.08	(76.45 - 92.84)
Creatinine	65	70.77	(58.17 - 81.4)	79	73.42	(62.28 - 82.73)
Uric acid	65	38.46	(26.65 - 51.36)	79	45.57	(34.31 - 57.17)
Aspartate aminotransferase / glutamic-oxalacetic transaminase	65	69.23	(56.55 - 80.09)	79	72.15	(60.93 - 81.65)
Alanine transaminase / glutamic-pyruvic transaminase	65	69.23	(56.55 - 80.09)	79	72.15	(60.93 - 81.65)
Lactate dehydrogenase	65	18.46	(9.92 - 30.03)	79	32.91	(22.75 - 44.4)
All appropriate medications administered	65	64.62	(51.77 - 76.08)	79	62.03	(50.41 - 72.72)
Magnesium sulfate	65	66.15	(53.35 - 77.43)	79	62.03	(50.41 - 72.72)
Hydralazine / labetalol / nifedipine (if diastolic blood pressure > 110 at first checkup)	19	89.47	(66.86 - 98.7)	15	100.00	(78.2 - 100)
Pre-eclampsia managed according to SMI standard	65	7.69	(2.54 - 17.05)	79	1.27	(0.03 - 6.85)

Table D7.14: Maternal eclampsia management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	3	100.00	(29.24 - 100)	8	100.0	(63.06 - 100)
Pulse / heart rate	3	100.00	(29.24 - 100)	8	100.0	(63.06 - 100)
Blood pressure	3	100.00	(29.24 - 100)	8	100.0	(63.06 - 100)
Respiratory rate	3	100.00	(29.24 - 100)	8	100.0	(63.06 - 100)
Lab tests	3	33.33	(0.84 - 90.57)	8	62.5	(24.49 - 91.48)
Urine protein	3	33.33	(0.84 - 90.57)	8	62.5	(24.49 - 91.48)
All appropriate medications administered	3	100.00	(29.24 - 100)	8	75.0	(34.91 - 96.81)
Magnesium sulfate	3	100.00	(29.24 - 100)	8	75.0	(34.91 - 96.81)
Hydralazine / labetalol / nifedipine (if diastolic blood pressure > 110 at first checkup)	2	100.00	(15.81 - 100)	3	100.0	(29.24 - 100)
Referred to complete facility	3	0.00	(0 - 70.76)	8	75.0	(34.91 - 96.81)
Eclampsia managed according to SMI standard	3	0.00	(0 - 70.76)	8	50.0	(15.7 - 84.3)

Table D7.15: Maternal eclampsia management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	8	37.5	(8.52 - 75.51)	6	50.00	(11.81 - 88.19)
Pulse / heart rate	8	100.0	(63.06 - 100)	6	100.00	(54.07 - 100)
Blood pressure	8	100.0	(63.06 - 100)	6	100.00	(54.07 - 100)
Respiratory rate	8	100.0	(63.06 - 100)	6	100.00	(54.07 - 100)
Patellar reflex	8	37.5	(8.52 - 75.51)	6	50.00	(11.81 - 88.19)
Lab tests	8	12.5	(0.32 - 52.65)	6	0.00	(0 - 45.93)
Urine protein	8	75.0	(34.91 - 96.81)	6	66.67	(22.28 - 95.67)
Platelet count	8	75.0	(34.91 - 96.81)	6	100.00	(54.07 - 100)
Creatinine	8	87.5	(47.35 - 99.68)	6	100.00	(54.07 - 100)
Uric acid	8	50.0	(15.7 - 84.3)	6	66.67	(22.28 - 95.67)
Aspartate aminotransferase / glutamic-oxalacetic transaminase	8	87.5	(47.35 - 99.68)	6	66.67	(22.28 - 95.67)
Alanine transaminase / glutamic-pyruvic transaminase	8	87.5	(47.35 - 99.68)	6	66.67	(22.28 - 95.67)
Lactate dehydrogenase	8	37.5	(8.52 - 75.51)	6	83.33	(35.88 - 99.58)
All appropriate medications administered	8	87.5	(47.35 - 99.68)	6	100.00	(54.07 - 100)
Magnesium sulfate	8	87.5	(47.35 - 99.68)	6	100.00	(54.07 - 100)
Hydralazine / labetalol / nifedipine (if diastolic blood pressure > 110 at first checkup)	4	100.0	(39.76 - 100)	4	100.00	(39.76 - 100)
Eclampsia managed according to SMI standard	8	0.0	(0 - 36.94)	6	0.00	(0 - 45.93)

Table D7.16: Maternal complications management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Sepsis managed according to SMI standard	26	80.77	(60.65 - 93.45)	45	86.67	(73.21 - 94.95)
Hemorrhage managed according to SMI standard	61	77.05	(64.5 - 86.85)	129	68.99	(60.25 - 76.84)
Pre-eclampsia managed according to SMI standard	34	14.71	(4.95 - 31.06)	115	16.52	(10.25 - 24.59)
Eclampsia managed according to SMI standard	3	0.00	(0 - 70.76)	8	50.00	(15.7 - 84.3)
Complications managed according to SMI standard	123	59.35	(50.12 - 68.11)	296	51.01	(45.16 - 56.84)

Table D7.17: Maternal complications management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Sepsis managed according to SMI standard	13	46.15	(19.22 - 74.87)	12	41.67	(15.17 - 72.33)
Hemorrhage managed according to SMI standard	60	13.33	(5.94 - 24.59)	35	31.43	(16.85 - 49.29)
Pre-eclampsia managed according to SMI standard	65	7.69	(2.54 - 17.05)	79	1.27	(0.03 - 6.85)
Eclampsia managed according to SMI standard	8	0.00	(0 - 36.94)	6	0.00	(0 - 45.93)
Complications managed according to SMI standard	146	13.01	(8.02 - 19.57)	132	12.88	(7.68 - 19.82)

Table D7.18: Neonatal sepsis management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	98	73.47	(63.59 - 81.88)	204	66.18	(59.24 - 72.64)
Pulse / heart rate	98	95.92	(89.88 - 98.88)	204	98.53	(95.76 - 99.7)
Respiratory rate	98	95.92	(89.88 - 98.88)	204	97.06	(93.71 - 98.91)
Temperature	98	94.90	(88.49 - 98.32)	204	96.08	(92.42 - 98.29)
Abdominal exam	98	74.49	(64.69 - 82.76)	204	69.61	(62.8 - 75.84)
Antibiotics administered	98	91.84	(84.55 - 96.41)	204	88.73	(83.56 - 92.72)
Evaluated by doctor (basic) or specialist (complete)	98	88.78	(80.8 - 94.26)	204	87.75	(82.44 - 91.91)
Referred to complete facility (if septic shock)	1	100.00	(2.5 - 100)	-	-	-
Sepsis managed according to SMI standard	98	66.33	(56.07 - 75.56)	204	62.25	(55.22 - 68.93)

Table D7.19: Neonatal sepsis management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	50	62	(47.17 - 75.35)	34	61.76	(43.56 - 77.83)
Pulse / heart rate	50	100	(92.89 - 100)	34	100.00	(89.72 - 100)
Respiratory rate	50	100	(92.89 - 100)	34	100.00	(89.72 - 100)
Temperature	50	98	(89.35 - 99.95)	34	100.00	(89.72 - 100)
Abdominal exam	50	64	(49.19 - 77.08)	34	61.76	(43.56 - 77.83)
Lab tests	50	0	(0 - 7.11)	34	0.00	(0 - 10.28)
Complete blood test	50	52	(37.42 - 66.34)	34	67.65	(49.47 - 82.61)
Oxygen saturation	50	40	(26.41 - 54.82)	34	2.94	(0.07 - 15.33)
C-reactive protein	50	72	(57.51 - 83.77)	34	55.88	(37.89 - 72.81)
Neutrophil band ratio / absolute ratio	50	22	(11.53 - 35.96)	34	11.76	(3.3 - 27.45)
Antibiotics administered	50	86	(73.26 - 94.18)	34	94.12	(80.32 - 99.28)
Evaluated by doctor (basic) or specialist (complete)	50	88	(75.69 - 95.47)	34	82.35	(65.47 - 93.24)
Sepsis managed according to SMI standard	50	0	(0 - 7.11)	34	0.00	(0 - 10.28)

Table D7.20: Neonatal asphyxia management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	18	77.78	(52.36 - 93.59)	37	94.59	(81.81 - 99.34)
Pulse / heart rate	18	88.89	(65.29 - 98.62)	37	97.30	(85.84 - 99.93)
Respiratory rate	18	77.78	(52.36 - 93.59)	37	94.59	(81.81 - 99.34)
APGAR score at one minute	18	83.33	(58.58 - 96.42)	37	97.30	(85.84 - 99.93)
APGAR score at five minutes	18	83.33	(58.58 - 96.42)	37	97.30	(85.84 - 99.93)
Laboratory tests	18	16.67	(3.58 - 41.42)	37	40.54	(24.75 - 57.9)
Glycemia	18	16.67	(3.58 - 41.42)	37	40.54	(24.75 - 57.9)
Oxygen saturation (if APGAR <= 3 at five minutes)	1	0.00	(0 - 97.5)	1	0.00	(0 - 97.5)
Heat application	18	44.44	(21.53 - 69.24)	37	59.46	(42.1 - 75.25)
Evaluated by doctor (if basic) or specialist (if complete)	18	83.33	(58.58 - 96.42)	37	83.78	(67.99 - 93.81)
Referred to complete facility (if APGAR <= 3 at five minutes)	1	100.00	(2.5 - 100)	1	100.00	(2.5 - 100)
AMBU / endotracheal intubation / cardiac massage (if APGAR <= 3 at five minutes)	1	100.00	(2.5 - 100)	1	100.00	(2.5 - 100)
Asphyxia managed according to SMI standard	18	11.11	(1.38 - 34.71)	37	21.62	(9.83 - 38.21)

Table D7.21: Neonatal asphyxia management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	47	97.87	(88.71 - 99.95)	36	97.22	(85.47 - 99.93)
Pulse / heart rate	47	100.00	(92.45 - 100)	36	97.22	(85.47 - 99.93)
Respiratory rate	47	100.00	(92.45 - 100)	36	97.22	(85.47 - 99.93)
APGAR score at one minute	47	97.87	(88.71 - 99.95)	36	100.00	(90.26 - 100)
APGAR score at five minutes	47	97.87	(88.71 - 99.95)	36	100.00	(90.26 - 100)
Laboratory tests	47	74.47	(59.65 - 86.06)	36	47.22	(30.41 - 64.51)
Glycemia	47	74.47	(59.65 - 86.06)	36	47.22	(30.41 - 64.51)
Oxygen saturation (if APGAR <= 3 at five minutes)	-	-	-	1	100.00	(2.5 - 100)
Heat application	47	74.47	(59.65 - 86.06)	36	91.67	(77.53 - 98.25)
Evaluated by doctor (if basic) or specialist (if complete)	47	100.00	(92.45 - 100)	36	97.22	(85.47 - 99.93)
Referred to complete facility (if APGAR <= 3 at five minutes)	-	-	-	-	-	-
Asphyxia managed according to SMI standard	47	53.19	(38.08 - 67.89)	36	38.89	(23.14 - 56.54)

Table D7.22: Neonatal low birth weight management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	32	50.00	(31.89 - 68.11)	44	45.45	(30.39 - 61.15)
Weight	32	96.88	(83.78 - 99.92)	44	97.73	(87.98 - 99.94)
Pulse / heart rate	32	96.88	(83.78 - 99.92)	44	97.73	(87.98 - 99.94)
Respiratory rate	32	96.88	(83.78 - 99.92)	44	97.73	(87.98 - 99.94)
Head circumference	32	84.38	(67.21 - 94.72)	44	86.36	(72.65 - 94.83)
Silverman-Anderson / Downes test	32	50.00	(31.89 - 68.11)	44	47.73	(32.46 - 63.31)
APGAR score / skin test	32	93.75	(79.19 - 99.23)	44	97.73	(87.98 - 99.94)
Glycemia lab test	32	21.88	(9.28 - 39.97)	44	22.73	(11.47 - 37.84)
Gestational age calculated using Capurro/Ballard	32	87.50	(71.01 - 96.49)	44	86.36	(72.65 - 94.83)
Weight classification (if in-facility)	32	100.00	(89.11 - 100)	44	100.00	(91.96 - 100)
Heat application	32	84.38	(67.21 - 94.72)	44	61.36	(45.5 - 75.64)
Breastfed / given glucose	32	96.88	(83.78 - 99.92)	44	97.73	(87.98 - 99.94)
Evaluated by doctor	32	90.62	(74.98 - 98.02)	44	77.27	(62.16 - 88.53)
Referred to complete facility (if weight < 1500 grams at basic facility)	2	0.00	(0 - 84.19)	8	37.50	(8.52 - 75.51)
Appropriate management of any associated complications	1	100.00	(2.5 - 100)	4	75.00	(19.41 - 99.37)
Low birth weight managed according to SMI standard	32	15.62	(5.28 - 32.79)	44	6.82	(1.43 - 18.66)

Table D7.23: Neonatal low birth weight management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	28	78.57	(59.05 - 91.7)	42	57.14	(40.96 - 72.28)
Weight	28	96.43	(81.65 - 99.91)	42	100.00	(91.59 - 100)
Pulse / heart rate	28	100.00	(87.66 - 100)	42	97.62	(87.43 - 99.94)
Respiratory rate	28	100.00	(87.66 - 100)	42	95.24	(83.84 - 99.42)
Head circumference	28	92.86	(76.5 - 99.12)	42	97.62	(87.43 - 99.94)
Silverman-Anderson / Downes test	28	85.71	(67.33 - 95.97)	42	61.90	(45.64 - 76.43)
APGAR score / skin test	28	96.43	(81.65 - 99.91)	42	100.00	(91.59 - 100)
Glycemia lab test	28	71.43	(51.33 - 86.78)	42	71.43	(55.42 - 84.28)
Gestational age calculated using Capurro/Ballard	27	100.00	(87.23 - 100)	39	94.87	(82.68 - 99.37)
Weight classification (if in-facility)	27	100.00	(87.23 - 100)	39	100.00	(90.97 - 100)
Heat application	28	82.14	(63.11 - 93.94)	42	90.48	(77.38 - 97.34)
Breastfed / given glucose	28	92.86	(76.5 - 99.12)	42	92.86	(80.52 - 98.5)
Evaluated by doctor	28	96.43	(81.65 - 99.91)	42	100.00	(91.59 - 100)
Appropriate management of any associated complications	1	100.00	(2.5 - 100)	2	100.00	(15.81 - 100)
Low birth weight managed according to SMI standard	28	42.86	(24.46 - 62.82)	42	40.48	(25.63 - 56.72)

Table D7.24: Neonatal prematurity management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	2	100	(15.81 - 100)	8	37.50	(8.52 - 75.51)
Weight	2	100	(15.81 - 100)	8	87.50	(47.35 - 99.68)
Pulse / heart rate	2	100	(15.81 - 100)	8	87.50	(47.35 - 99.68)
Respiratory rate	2	100	(15.81 - 100)	8	87.50	(47.35 - 99.68)
Head circumference	2	100	(15.81 - 100)	8	75.00	(34.91 - 96.81)
Silverman-Anderson / Downes test	2	100	(15.81 - 100)	8	62.50	(24.49 - 91.48)
APGAR score / skin test	2	100	(15.81 - 100)	8	75.00	(34.91 - 96.81)
Glycemia lab test	2	100	(15.81 - 100)	8	37.50	(8.52 - 75.51)
Gestational age calculated using Capurro/Ballard	2	100	(15.81 - 100)	7	85.71	(42.13 - 99.64)
Weight classification (if in-facility)	2	100	(15.81 - 100)	7	100.00	(59.04 - 100)
Heat application	2	100	(15.81 - 100)	8	37.50	(8.52 - 75.51)
Breastfed / given glucose	2	100	(15.81 - 100)	8	87.50	(47.35 - 99.68)
Evaluated by doctor	2	100	(15.81 - 100)	8	87.50	(47.35 - 99.68)
Referred to complete facility (if weight < 1500 grams at basic facility)	-	-	-	2	100.00	(15.81 - 100)
Appropriate management of any associated complications	-	-	-	1	100.00	(2.5 - 100)
prematurity managed according to SMI standard	2	100	(15.81 - 100)	8	0.00	(0 - 36.94)

Table D7.24: Neonatal prematurity management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs checked	2	100	(15.81 - 100)	8	37.50	(8.52 - 75.51)
Weight	2	100	(15.81 - 100)	8	87.50	(47.35 - 99.68)
Pulse / heart rate	2	100	(15.81 - 100)	8	87.50	(47.35 - 99.68)
Respiratory rate	2	100	(15.81 - 100)	8	87.50	(47.35 - 99.68)
Head circumference	2	100	(15.81 - 100)	8	75.00	(34.91 - 96.81)
Silverman-Anderson / Downes test	2	100	(15.81 - 100)	8	62.50	(24.49 - 91.48)
APGAR score / skin test	2	100	(15.81 - 100)	8	75.00	(34.91 - 96.81)
Glycemia lab test	2	100	(15.81 - 100)	8	37.50	(8.52 - 75.51)
Gestational age calculated using Capurro/Ballard	2	100	(15.81 - 100)	7	85.71	(42.13 - 99.64)
Weight classification (if in-facility)	2	100	(15.81 - 100)	7	100.00	(59.04 - 100)
Heat application	2	100	(15.81 - 100)	8	37.50	(8.52 - 75.51)
Breastfed / given glucose	2	100	(15.81 - 100)	8	87.50	(47.35 - 99.68)
Evaluated by doctor	2	100	(15.81 - 100)	8	87.50	(47.35 - 99.68)
Referred to complete facility (if weight < 1500 grams at basic facility)	-	-	-	2	100.00	(15.81 - 100)
Appropriate management of any associated complications	-	-	-	1	100.00	(2.5 - 100)
prematurity managed according to SMI standard	2	100	(15.81 - 100)	8	0.00	(0 - 36.94)

Table D7.25: Neonatal complications management, basic facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Sepsis managed according to SMI standard	98	66.33	(56.07 - 75.56)	204	62.25	(55.22 - 68.93)
Asphyxia managed according to SMI standard	18	11.11	(1.38 - 34.71)	37	21.62	(9.83 - 38.21)
Low birth weight managed according to SMI standard	32	15.62	(5.28 - 32.79)	44	6.82	(1.43 - 18.66)
Prematurity managed according to SMI standard	2	100.00	(15.81 - 100)	8	0.00	(0 - 36.94)
Complications managed according to SMI standard	149	49.66	(41.38 - 57.96)	288	47.22	(41.34 - 53.16)

Table D7.26: Neonatal complications management, complete facilities

	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Sepsis managed according to SMI standard	50	0.00	(0 - 7.11)	34	0.00	(0 - 10.28)
Asphyxia managed according to SMI standard	47	53.19	(38.08 - 67.89)	36	38.89	(23.14 - 56.54)
Low birth weight managed according to SMI standard	28	42.86	(24.46 - 62.82)	42	40.48	(25.63 - 56.72)
Prematurity managed according to SMI standard	9	0.00	(0 - 33.63)	18	16.67	(3.58 - 41.42)
Complications managed according to SMI standard	131	27.48	(20.05 - 35.96)	123	26.02	(18.52 - 34.7)

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Incinerator at facility	55	50.9	(37.1 - 64.6)	45	60.0	(44.3 - 74.3)	56	57.1	(43.2 - 70.3)
Contract with other facility for disposal (if no incinerator)	27	14.8	(4.2 - 33.7)	18	22.2	(6.4 - 47.6)	24	41.7	(22.1 - 63.4)
Manual for decontamination	55	32.7	(20.7 - 46.7)	45	86.7	(73.2 - 94.9)	56	51.8	(38 - 65.3)

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Incinerator at facility	6	83.3	(35.9 - 99.6)	11	90.9	(58.7 - 99.8)	28	92.9	(76.5 - 99.1)
Contract with other facility for disposal (if no incinerator)	1	0.0	(0 - 97.5)	1	100.0	(2.5 - 100)	2	50.0	(1.3 - 98.7)
Manual for decontamination	6	100.0	(54.1 - 100)	11	100.0	(71.5 - 100)	28	75.0	(55.1 - 89.3)

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

	Baseline			First Follow-Up			Second Follow-Up		
	N	%	CI	N	%	CI	N	%	CI
Incinerator at facility	3	66.7	(9.4 - 99.2)	3	66.7	(9.4 - 99.2)	6	100.0	(54.1 - 100)
Contract with other facility for disposal (if no incinerator)	1	0.0	(0 - 97.5)	1	100.0	(2.5 - 100)	-	-	-
Manual for decontamination	3	100.0	(29.2 - 100)	3	100.0	(29.2 - 100)	6	66.7	(22.3 - 95.7)

Appendix E: Indicator Definitions

8.2 Performance indicators

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

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: gestational age calculation using Capurro or Ballard (if neonate was not referred from another facility) + classification of neonate by gestational age recorded (if neonate was not referred from another facility) + (heart rate / pulse) + respiratory rate + weight + Silverman-Anderson/Downes score + Head circumference + (Apgar score (1 or 5 minutes) / skin evaluation) + glycemia lab test + heat application + neonate was fed glucose (breastfed / oral serum / IV) + evaluated by a doctor + neonate was referred (if weight is < 1500 gr) + appropriate care (below):

- if neonate has pneumonia: antibiotics / observed / referred to complete facility
- if neonate has diarrhea: liquids (breastmilk / oral rehydration salts) / observed / referred to complete facility
- if neonate has seizures: anticonvulsants: (tazobactam / phenobarbital / levetiracetam / lidocaine / pentothal / tiobarbital) / observed / referred to complete facility
- if neonate has hypoglycemia: IV glucose serum / observed / referred to complete facility

Complete:

Observe the following in the record: gestational age calculation using Capurro or Ballard (if neonate was not referred from another facility) + classification of neonate by gestational age recorded (if neonate was not referred from another facility) + (heart rate / pulse) + respiratory rate + weight

+ Silverman-Anderson/Downes score + Head circumference + (Apgar score (1 or 5 minutes) / skin evaluation) + glycemia lab test + heat application + neonate was fed glucose (breastfed / oral serum / IV) + evaluated by a doctor + appropriate care (below):

- if neonate has pneumonia: antibiotics
- if neonate has diarrhea: liquids (breastmilk / oral rehydration salts)
- if neonate has seizures: anticonvulsants (tazobactan / phenobarbital / levetiracetam / lidocaine / pentothal / tiobarbital)
- if neonate has hypoglycemia: IV glucose serum

Low birth weight:

Basic:

Observe the following in the record: gestational age calculation using Capurro or Ballard (if neonate was not referred from another facility) + classification of neonate by weight recorded (if neonate was not referred from another facility) + (heart rate / pulse) + respiratory rate + weight + Silverman-Anderson/Downes score + Head circumference + (Apgar score (1 or 5 minutes) / skin evaluation) + glycemia lab test + heat application + neonate was fed glucose (breastfed / oral serum / IV) + evaluated by a doctor + neonate was referred (if weight is <1500 gr) + appropriate care (below):

- if neonate has pneumonia: antibiotics / observed / referred to complete facility
- if neonate has diarrhea: liquids (breastmilk / oral rehydration salts) / observed / referred to complete facility
- if neonate has seizures: anticonvulsants: (tazobactan / phenobarbital / levetiracetam / lidocaine / pentothal / tiobarbital) / observed / referred to complete facility
- if neonate has hypoglycemia: IV glucose serum / observed / referred to complete facility

Complete:

Observe the following in the record: gestational age calculation using Capurro or Ballard (if neonate was not referred from another facility) + classification of neonate by weight recorded (if neonate was not referred from another facility) + (heart rate / pulse) + respiratory rate + weight + Silverman-Anderson/Downes score + Head circumference + (Apgar score (1 or 5 minutes) / skin evaluation) + glycemia lab test + heat application + neonate was fed glucose (breastfed / oral serum / IV) + evaluated by a doctor + appropriate care (below)

- if neonate has pneumonia: antibiotics
- if neonate has diarrhea: liquids (breastmilk / oral rehydration salts)
- if neonate has seizures: anticonvulsants (tazobactan / phenobarbital / levetiracetam / lidocaine / pentothal / tiobarbital)
- if neonate has hypoglycemia: IV glucose serum

Asphyxia: excluding cases referred to the facility

Basic & Complete:

Observe the following in the record: (heart rate / pulse) + respiratory rate + heat application + Apgar score at 1 minutes + Apgar score at 5 minutes + glycemia test + oxygen saturation level (if severe asphyxia) + oxygen application (if severe asphyxia) + (AMBU / positive pressure ventilation / cardiac massage / endotracheal intubation (if severe asphyxia)) + evaluated by a doctor + referred to a complete facility (if severe asphyxia & basic facility) *severe asphyxia is defined as 5-minute Apgar score ≤ 3

Sepsis:

Basic:

Observe the following in the record: (heart rate / pulse) + temperature + respiratory rate + abdominal examination + antibiotics + evaluated by a doctor + referred to a complete facility (if septic shock)

Complete:

Observe the following in the record: (heart rate / pulse) + temperature + respiratory rate + abdominal examination + antibiotics + oxygen saturation level + blood biometry / (platelet count + leukocyte count + hemoglobin + hematocrit) + hemoculture + c-reactive protein + neutrophil band ratio/neutrophil absolute ratio + antibiotics + evaluated by a specialist

4080: Women with obstetric complications (sepsis, hemorrhage, severe pre-eclampsia, and eclampsia) managed according to the norm in the last 2 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:

Hemorrhage:

Basic:

Observe the following in the record: (heart rate / pulse) + blood pressure + (ringer's lactate / hartmann's / saline solution) + appropriate care (below):

- If incomplete/complicated abortion with hemorrhage: (AMEU / curettage / referred to complete facility)
- If ectopic/broken ectopic pregnancy: (laparotomy / salpingectomy / surgical repair / referred to complete facility)
- If placenta previa with hemorrhage: (caesarean section / referred to complete facility)
- If placental abruption: (vaginal birth / caesarean section / referred to complete facility)
- If uterine rupture: (caesarean section / laparotomy / hysterectomy / surgical repair / referred to complete facility)

- If uterine atony: (uterotonic (oxytocin / misoprostol / methlergonovine) + (uterine massage / bimanual compression / uterine tamponade / compressive sutures / hysterectomy)) / referred to complete facility
- If uterine inversion: (uterotonic (oxytocin / misoprostol / methlergonovine) + (reposition/restoration of the uterus under sedation or anesthesia with surgical or non-surgical techniques) / referred to complete facility
- If total or partial placental retention / placental remnants / accretion: (uterotonic (oxytocin / misoprostol / methlergonovine) + (manual extraction / curettage / laparotomy / hysterectomy) / referred to a complete facility

Complete:

Observe the following in the record: (heart rate / pulse) + blood pressure + hematocrit + hemoglobin + platelet count + (ringer's lactate / hartmann's / saline solution) + appropriate care (below)

- If incomplete/complicated abortion with hemorrhage: (AMEU / curettage)
- If ectopic/broken ectopic pregnancy: (laparotomy / salpingectomy / surgical repair)
- If placenta previa with hemorrhage: caesarean section
- If placental abruption: (vaginal birth / caesarean section)
- If uterine rupture: (caesarean section / laparotomy / hysterectomy / surgical repair)
- If uterine atony: uterotonic (oxytocin / misoprostol / methlergonovine) + (uterine massage / bimanual compression / aortal compression / uterine tamponade / compressive sutures / hysterectomy)
- If uterine inversion: uterotonic (oxytocin / misoprostol / methlergonovine) + reposition/restoration of the uterus under sedation or anesthesia with surgical or non-surgical techniques
- If total or partial placental retention / placental remnants / accretion: uterotonic (oxytocin / misoprostol / methlergonovine) + (manual extraction / curettage / laparotomy / hysterectomy)

Severe Pre-eclampsia & Eclampsia:

Basic:

Observe the following in the record: (heart rate / pulse) + blood pressure + respiratory rate + urine protein + magnesium sulfate + hydralazine/labetalol/nifedipine (if diastolic blood pressure is ever > 110) + referred to a complete facility

Complete:

Observe the following in the record: (heart rate / pulse) + blood pressure + respiratory rate + patellar reflex + urine protein + platelet count + creatinine + uric acid + (aspartate aminotransferase / glutamic-oxalacetic transaminase) + (alanine aminotransferase / glutamic-pyruvic transaminase) + lactate dehydrogenase + magnesium sulfate + hydralazine/labetalol/nifedipine (if diastolic blood pressure is ever > 110)

Sepsis:

Basic:

Observe the following in the record: (heart rate / pulse) + blood pressure + temperature + antibiotics: (amikacin / clindamycin / gentamycin / ampicillin / metronidazole / penicillin / crystalline penicillin / piperacillin / tazobactam / ceftriaxone / amoxicillin / nitrofurantoin / ciprofloxacin) + appropriate care (below)

- If postpartum or post-cesarean endometritis: antibiotics + observation/referred to a complete facility
- If pelvic abscess: antibiotics + (drainage / laparotomy / hysterectomy / surgical repair / referred to a complete facility)
- If retention of placental remains: antibiotics + (curettage / laparotomy / hysterectomy / referred to a complete facility)

Complete:

Observe the following in the record: (heart rate / pulse) + blood pressure + temperature + hematic biometry / (hemoglobin + hematocrit + platelet count + leukocyte count) + antibiotics: (amikacin / clindamycin / gentamycin / ampicillin / metronidazole / penicillin / crystalline penicillin / piperacillin / tazobactam / ceftriaxone / amoxicillin / nitrofurantoin / ciprofloxacin)+ appropriate care (below)

- If postpartum or post-cesarean endometritis: antibiotics
- If pelvic abscess: antibiotics + (drainage / laparotomy / hysterectomy / surgical repair)
- If retention of placental remains: antibiotics + (curettage / laparotomy / hysterectomy)

4130: Appropriate immediate postpartum care for neonates following delivery in the last two years

Denominator:

Total number of postpartum records for live births at basic and complete facilities in the sample

Formula:

Basic & Complete: Observe the following in the record: Vitamin K + prophylaxis application with (ophthalmic oxytetracycline / chloramphenicol) + curing of the umbilical cord with (water and chlorhexidine) + evaluation of the presence of malformations + BCG vaccine + APGAR score (at 1 or 5 minutes) + respiratory rate + weight + height + head circumference

Social Agreements: Community Seed Social Agreements with appropriate documentation at the health facility

Denominator:

40 Communities with Social Agreements (ASSC-B Seed/Innovation Funds Documents) stored at a health facility in the sample

Formula:

For each community, observe:

- seed fund observed
- seed fund commitment signed by representative of ESAFC
- seed fund commitment signed by representative of community
- seed fund commitment signed by municipal director
- innovation funds agreement observed
- project support document for innovation fund (approved by municipal health directorate) observed

Family Planning: Women of who received contraception post-delivery in the last year

Denominator:

Total number of postpartum records at basic and complete facilities in the last year in the sample, excluding women who were referred for contraception

Formula:

Basic and Complete: Observe the following in the record: Provided at least one of the following after delivery: sterilization / IUD / condom / any injectable

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 and basic facilities in the last two years, excluding women who did not receive antenatal care in-facility

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/RPR.

4050: Institutional postpartum patients who were evaluated and registered in clinical records within two hours after birth in the last two years

Denominator:

Total number of postpartum records at basic and complete facilities, excluding women who were transferred to the facility and women who delivered by caesarean section.

Formula:

Basic & Complete: Observe the following in the record: Woman had four checks of blood pressure + temperature + heart rate/pulse in the first two hours after delivery. Woman had one check of blood pressure + temperature + heart rate/pulse at discharge.

4065: 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

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

4095: Active management of the third stage of labor for uncomplicated deliveries in last two years

Denominator:

Total number of delivery records at basic and complete facilities

Formula:

Basic & Complete: Observe the following in the record: Time and date of administration of oxytocin / other uterotonic + Uterine massage

7000: Cold chain

Denominator:

Total number of ambulatory and basic facilities that store vaccines

Formula:

Ambulatory & Basic: For each functional refrigerator at the facility, observe the following: Temperature monitoring chart + Temperature recorded twice daily in past 30 days, excluding weekends and holidays

7010: Child care services

Denominator:

Total number of ambulatory and basic facilities that provide child care services

Formula:

Ambulatory & Basic: Observe the following in the facility: Pediatric scale + Height rod + Stethoscope + Thermometer + Growth-development card. Continuous three-month supply of the following: Pentavalent / (DPT + Hep B + HiB) vaccine + Polio vaccine + MMR vaccine + Rotavirus vaccine + Pneumococcal vaccine + BCG vaccine + Ferrous sulfate / Zinc gluconate / Zinc sulfate + Albendazole / Mebendazole

Basic only: Pediatric stethoscope. Continuous three month supply of: Erythromycin / Amoxicillin / Benzylpenicillin

7020: Pre/postnatal care services

Denominator:

Total number of ambulatory and basic facilities that provide pre/postnatal care services

Formula:

Ambulatory & Basic: Observe the following in the facility: Scale with height rod + Gynecological table + Lamp + Obstetric tape / CLAP + Blood pressure apparatus + Stethoscope + Sphygmomanometer + Pregnancy wheel

Basic only: Observe the following: IUD kit + if the basic facility has a laboratory: Rapid HIV test + Rapid syphilis test + Urinalysis equipment + Glucometer + Blood test equipment + Microscope + Automated cell counter

7030: Emergency care services

Denominator:

Total number of ambulatory and basic facilities that provide pre/postnatal care services

Formula:

Basic: Continuous three-month supply of the following: Dexamethasone + Penicillin crystals/ IV ampicillin / Amoxicillin / Cephalexin / Nitrofurantoin + Gentamicin + Magnesium sulfate + Hydralazine + Ergobasine / Ergonovine maleate / Ergometrine / Oxytocin

7050: Family planning services

Denominator:

Total number of ambulatory and basic facilities that store family planning methods

Formula:

Ambulatory & Basic: Continuous three-month supply of the following: Condom + Oral contraceptive pill + Injectable contraceptive

Basic only: Intrauterine device

8870: Sociocultural conditions

Denominator:

Total number of centros de salud in the sample

Formula:

Centros de Salud: Observe delivery area with sociocultural accommodations available to patients