SMI-Honduras

Household Census and Survey Data Quality Report

Second Follow-up Measurement

May 2018

Contents

This report of the Salud Mesoamérica Initiative (SMI) Honduras household survey 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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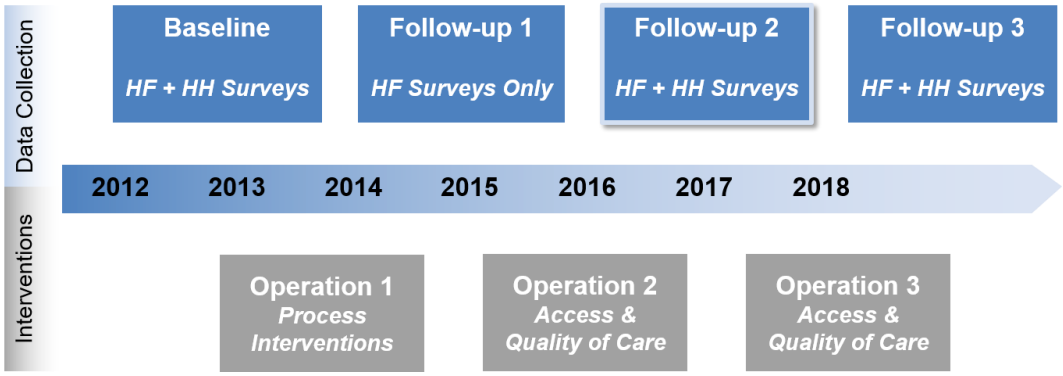
1 CHAPTER 1: INTRODUCTION

The 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% 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 aid (RBA) 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.

1.1 Objectives

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 Honduras, 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). The use of health facility and household data collection methods permits the measurement of supply- and demand-side information on the Initiative. The pairing of the two types of surveys is a defining feature, designed to capture key indicators in a robust and multidimensional way. The timeline of data collection, evaluation, and interventions is shown in Figure 1.1.

Figure 1.1: SMI-Honduras timeline



The objectives of the SMI-Honduras second follow-up household survey are to capture household characteristics, reported maternal and child health data for women 15-49 years of age and for children 0-59 months of age, and anthropometric measurements including height, weight, and hemoglobin concentration for children. Community data collection permits the measurement of changes in health status, access to health care, and satisfaction with health care, as well as an array of data points which give context to these factors.

Chapter 1 provides a general overview of the design and implementation of the SMI-Honduras second follow-up household census and SMI-Honduras second follow-up household survey and discusses the design and coverage of the study in both intervention and comparison areas. The subsequent chapters present results of the SMI-Honduras second follow-up household survey from intervention areas only. Appendix D presents results from comparison areas only, and Appendix E presents results pooled from intervention and comparison areas.

1.2 SMI household census and survey

The SMI household census is used to capture the age and sex distribution of all of the usual members of all households in selected segments. Basic information including relationship to the head of the household and marital status is also collected. Children aged 0-59 months who have one or more parent residing in the same household are linked to their mother and/or father by way of unique household member identification codes.

Data from the SMI household census are used to identify and select eligible households for the detailed interviews and the physical measurements module (Figure 1.2). The household survey is typically conducted within one month of the household census. The SMI household survey includes three components: the Household Characteristics Questionnaire, the Maternal and Child Health Questionnaire, and the Physical Measurements Module.

The household questionnaire collects information on the source of water, type of toilet facilities, exposure to secondhand smoke, ownership of various assets including durable goods, agricultural land, and livestock, and household expenses and sources of health care financing.

The Maternal and Child Health Questionnaire covers eligible women's background characteristics (including education, occupation, and exposure to media), access to health care, current health status, recent history of illness and associated medical expenses, fertility preferences, knowledge and use of family planning methods (including barriers to use), exposure to health system interventions, and satisfaction with community health workers. Women who have been pregnant in the last five years answer questions about birth history; antenatal, delivery, and postpartum care; birth spacing; breastfeeding; and infant feeding practices.

Caretakers of children aged 0-5 years are asked detailed questions for each child under age 5 on topics such as child's current health status, recent history of illness including diarrhea, fever, and acute upper respiratory infection and associated medical expenses, child's exposure to health system interventions, immunization, and supplementation history.

The Physical Measurements Module captures weight, height/length, and hemoglobin concentrations of children aged 0-59 months. Portable scales and height rods were used for the anthropometric measurements and hemoglobin levels were assessed in the field using a portable HemoCue™ machine. Medically trained personnel (i.e., anthropometrists or professional nurses) performed all assessments.

1.3 Methodology

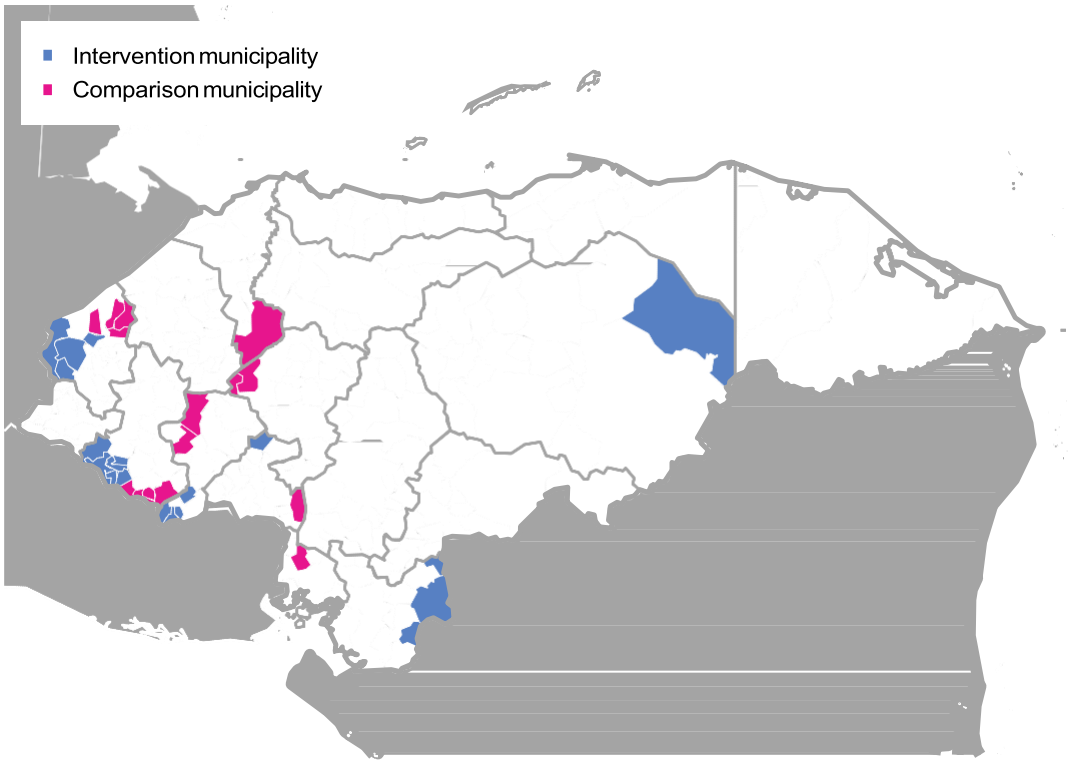
The study design for the SMI-Honduras second follow-up household survey provides representative estimates of the coverage of key health interventions and indicators for a geographic area that

approximates the lowest wealth quintile of the population of Honduras.

1.3.1 *Study area*

The primary administrative unit in Honduras is the department. Honduras has 18 departments, and nine were purposefully selected for SMI-Honduras– Comayagua, Copán, Cortés, Choluteca, Intibucá, La Paz, Lempira, Olancho, Valle. From those nine departments, IDB identified 18 intervention municipalities in which to conduct the baseline SMI household survey for the Initiative on the basis of their high concentration of residents in the country's lowest wealth quintile, and 16 comparison municipalities with similar socioeconomic characteristics and ethnic composition (Figure 1.3). From these 33 municipalities, a two-stage clustered random sample of eligible households was selected to reach the sample sizes shown in Table 1.1.

Figure 1.3: Map of Salud Mesoamérica Initiative study area



1.3.2 *First-stage sample selection: census segments*

The household survey uses a two-stage random sampling design in order to balance survey administration costs with the ability to make estimates representative of the population in the study area. For the SMI-Honduras household census, the primary sampling unit (PSU) is the aldea (village) from the 2013 Honduras Population Census. A representative sample of these clusters ("segments") was randomly selected from a sampling frame of all segments in SMI municipalities with probability proportional to size,

where size is measured by the number of occupied households. Samples for intervention and comparison strata, and for baseline and follow-up rounds, were selected independently.

A set of alternate segments was selected using identical methodology, to be surveyed in the event that any of the selected segments could not be surveyed and needed to be replaced due to security concerns, community rejection of the study, or a high proportion of absent households. In Honduras in the 2017 follow-up survey, four segments in intervention areas were replaced due to security concerns. Of the two segments requiring replacement in Dulce Nombre de Culmí, Olancho, one was replaced with an alternate segment from the same municipality, and the second was replaced with a randomly selected alternate from intervention areas outside Dulce Nombre de Culmí due to widespread security concerns in Olancho. The two segments requiring replacement in Cabañas, Copán were substituted with randomly selected alternates from other intervention municipalities within Copán department after it was determined that surveying in the alternate segments of Cabañas municipality posed excessive risk. Counts by municipality of segments where data collection was completed successfully are shown in Figure 1.4.

Table 1.1: Number of segments per municipality in SMI area

Intervention				Comparison			
Department	Municipality	2013	2017	Department	Municipality	2013	2017
Choluteca	Concepción de Maria	6	6	Comayagua	San José de Comayagua	2	1
Choluteca	Duyure	1	1	Comayagua	Taulabé	5	3
Choluteca	San Marcos de Colon	5	6	Copán	La Jigua	1	0
Copán	Cabañas	3	1	Copán	Nueva Arcadia	7	5
Copán	Copán Ruinas	8	10	Copán	San Antonio	3	0
Copán	San Jerónimo	1	1	Copán	San Nicolás	1	1
Copán	Santa Rita	6	8	Cortés	Santa Cruz de Yojoa	15	9
Intibucá	Concepción	2	2	Intibucá	San Francisco de Opalaca	2	1
Intibucá	Magdalena	1	1	Intibucá	San Miguelito	1	0
Intibucá	San Antonio	2	1	La Paz	Aguanqueterique	1	1
Intibucá	Santa Lucía	1	1	Lempira	Candelaria	1	0
La Paz	Santiago de Puringla	3	5	Lempira	La Virtud	1	1
Lempira	Cololaca	2	2	Lempira	Mapulaca	1	0
Lempira	Guarita	2	2	Lempira	Piraera	3	1
Lempira	San Juan Guarita	1	1	Lempira	Virginia	0	1
Lempira	Tomalá	1	2	Valle	Langue	4	1
Lempira	Valladolid	1	1				
Olancho	Dulce Nombre de Culmí	5	5				

1.3.3 *Second-stage sample selection: households*

The SMI-Honduras second follow-up household census is conducted in each of the randomly selected segments prior to the SMI-Honduras second follow-up household survey in order to identify all eligible

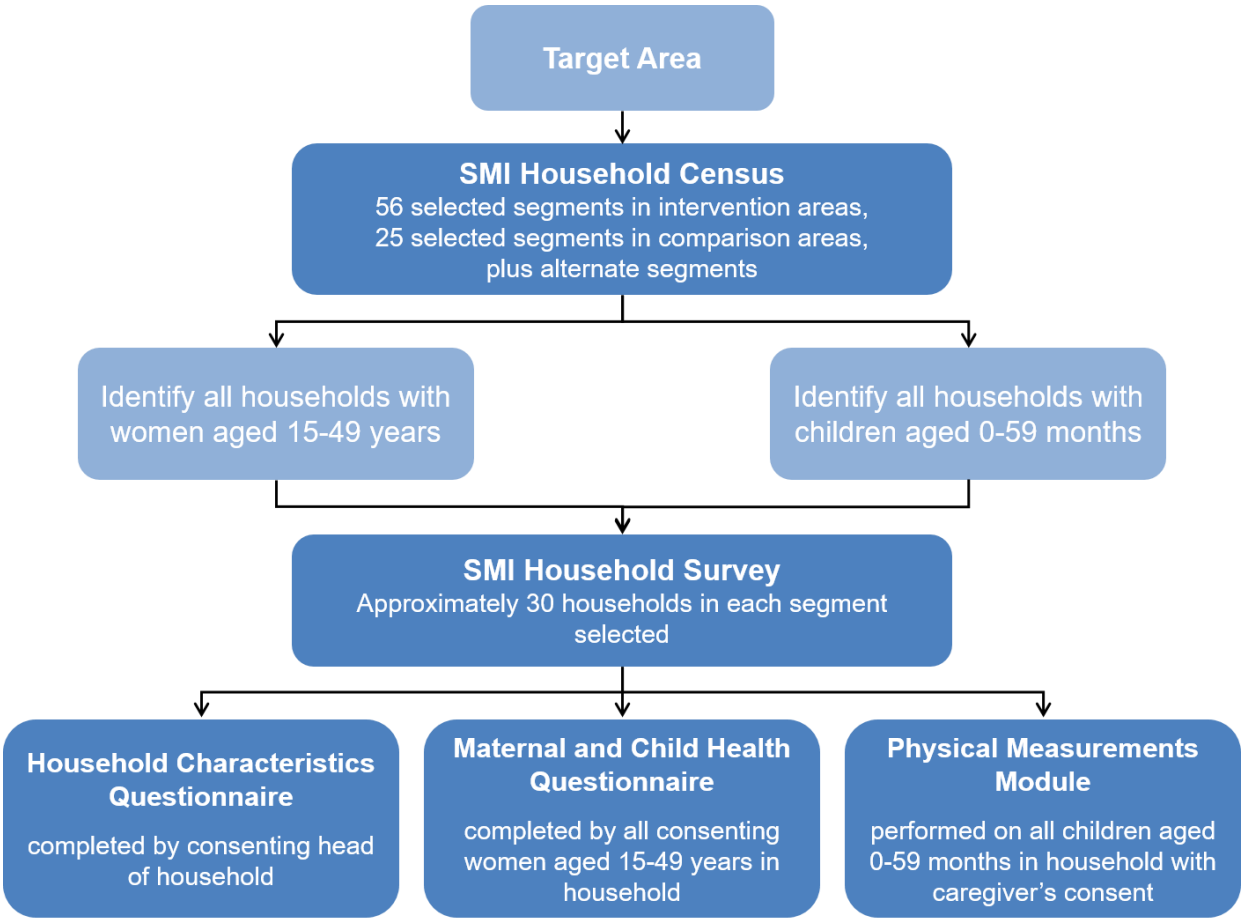
women and children for second-stage sampling. Interviewers visit every household in the segment and create a household roster capturing the age and sex distribution of household members.

Eligible households are systematically selected from the complete census listing for participation in the SMI-Honduras Household Survey. Thirty households are selected for participation, 25 households with at least one eligible child and five households with only eligible women. In order to ensure at least 30 complete interviews per segment, 10 backup households, eight with at least one eligible child and two with only eligible women, are selected at random in case of refusals or absent households.

All women aged 15-49 years who are members of the selected household are eligible to be interviewed, and all children aged 0-59 months who are members of the selected household are eligible for the physical measurement module. Any household head or other individual knowledgeable about household characteristics and expenditures is permitted to respond to the household characteristics module, while any primary caregiver of a child 0-59 months is eligible to inform for the child health interview module, regardless of sex or age.

A schematic diagram of the survey implementation is shown in Figure 1.5. Appendix A provides a detailed description of sampling methods.

Figure 1.5: Schematic diagram of SMI survey implementation



1.4 Survey implementation

1.4.1 *Data collection instruments*

Questionnaires were initially developed in English, and then translated to Spanish during the baseline measurement. To best reflect the issues most relevant to the region under study and the local language, the Spanish-language questionnaires were revised following input from key stakeholders and at the conclusion of the baseline and first follow-up pilot studies (described below). Study areas included a substantial proportion of indigenous populations, many of them also Spanish speakers.

All surveys were 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.

1.4.2 *Training and supervision of data collectors*

At the baseline, a total of 43 people were trained in December 2012 to serve as supervisors and interviewers. Training sessions for the second follow-up survey were conducted in Honduras in May 2017. For household and census data collection, 28 surveyors and eight anthropometrists were trained. All surveyors underwent a week-long training, which included three days of in-classroom instruction and practice of interview application. 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. 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. IHME held debriefing and re-training sessions with surveyors post-pilot and provided continued training during the first week of data collection in sampled communities.

1.4.3 *Data collection, management, and analysis*

The SMI-Honduras second follow-up household census, which captures basic demographic characteristics of all usual household occupants, was carried out between January 17, 2013 and May 2, 2013, at the baseline, and between May 29 and October 6, 2017 in in the second follow-up.

Data collection for the SMI-Honduras second follow-up household survey at the baseline began on February 10, 2013, and was completed on June 1, 2013. At the follow-up, data collection began June 27, 2017, and was completed on October 25, 2017. To assure completeness of the sample, field staff were instructed to return to selected households up to three times (on different days, and at least once on a weekend) in an attempt to complete the Household Characteristics Questionnaire, the Maternal and Child Health Questionnaire, and the Physical Measurements Module. Households that refused to participate or were absent at all three visits were substituted with randomly selected alternates.

Data collection teams, consisting of one supervisor and three to five interviewers were deployed to conduct the SMI household census and the SMI household survey. Supervisors were responsible for reviewing questionnaires for quality and consistency prior to departing to each segment. There were eight supervisors overseeing the SMI household census and SMI household survey at baseline, and six supervisors overseeing the follow-up survey.

Data were collected using computer netbooks equipped with CAPI software. Field team leaders monitored the implementation of the survey and report feedback. Data collection using CAPI allowed data to be transferred instantaneously once a survey was completed via a secure connection to IHME. IHME monitored collected data on a continuous basis and provided feedback. Suggestions, surveyor feedback, and any modifications were incorporated into the instruments and readily transmitted to the field.

Data analysis was conducted at IHME using STATA version 14 and R version 3. Performance and monitoring indicators were calculated at IHME following indicator definitions provided by IDB.

The total number of completed interviews with heads of households in the census is shown in Table 1.2, and the total number of completed interviews with heads of households in the household survey is shown in Table 1.3. The total number women of reproductive age who participated in the household survey for

each department in Honduras is shown in Table 1.4, and the total number of physical measurements of children aged 0-59 months performed, with corresponding response rates by department, is shown in Table 1.5. Response rates were calculated using the following formula: ([# surveyed] ÷ [# selected participants]). High non-response may affect the reliability of the estimates.

According to the 2013 Honduras Population Census, we expected a total of 20,756 occupied households in the 81 selected segments in the second follow-up. The SMI household listing exercise found 13,358 occupied households in these segments. Of the 13,358 occupied households, 12,565 completed the SMI household census, yielding a response rate of 94 % for this portion of the survey.

Based on information collected during the SMI household census, a subset of households were visited for individual interviews. A total of 12,558 households were visited for the individual interviews in intervention and comparison areas during the second follow-up. Of these, a total of 2,439 Household Characteristics Questionnaires were completed with heads of households, yielding a household response rate of 95.1% in intervention areas and 94.5% in comparison areas.

Using the household roster completed as part of the SMI household survey, 3,109 women of reproductive age (15-49 years) were identified in the intervention and comparison areas during the second follow-up from the sub-sample of interviewed households as eligible for the Maternal and Child Health Questionnaire. Of these women, 3,099 successfully completed the questionnaire (99.9% in intervention areas and 99.3% in comparison areas). The household roster completed as part of the SMI household survey was also used to identify 2,500 children aged 0-59 months as eligible for the Physical Measurements Module among the interviewed households in intervention and comparison areas during the second follow-up. 2,492 of these children participated in either the interview or measurements module (99.8% in intervention areas and 99.5% in comparison areas).

Among those households that were occupied but did not complete the SMI household census, the majority of the non-response for households and individuals was due to household members refusing the interview or being absent.

Table 1.2: Households participating in the SMI census and response rates, by department

	Baseline 2013				Second Follow-Up 2017			
	No. households	No. households eligible	No. households censused	Census response rate, %	No. households	No. households eligible	No. households censused	Census response rate, %
Choluteca	1851	1873	1850	98.8	2464	2208	2135	96.7
Comayagua	1079	1094	1079	98.6	824	690	646	93.6
Copán	5070	5115	5061	98.9	4728	4340	4206	96.9
Cortés	2405	2459	2405	97.8	1768	1639	1578	96.3
Intibucá	1495	1509	1489	98.7	1079	962	950	98.8
La Paz	627	632	627	99.2	1281	1091	1014	92.9
Lempira	1776	1782	1776	99.7	1546	1207	1085	89.9
Olancho	835	843	834	98.9	985	789	762	96.6
Valle	608	639	605	94.7	210	193	182	94.3
Intervention	8134	8198	8121	99.1	10268	9040	8705	96.3
Comparison	7612	7748	7605	98.2	4617	4079	3853	94.5

*Response rate calculated as the number of complete or partial interviews over total occupied households.
Overall response rate = household response rate*census response rate.

Table 1.3: Households participating in SMI household survey and response rates, by department

	Baseline 2013				Second Follow-Up 2017			
	No. households selected	No. households interviewed	Household response rate, %	Overall response rate, %	No. households selected	No. households interviewed	Household response rate, %	Overall response rate, %
Choluteca	402	365	90.8	89.7	398	391	98.2	95.0
Comayagua	220	210	95.5	94.1	123	120	97.6	91.3
Copán	946	913	96.5	95.5	837	783	93.5	90.7
Cortés	508	453	89.2	87.2	283	272	96.1	92.5
Intibucá	317	264	83.3	82.2	183	180	98.4	97.1
La Paz	125	120	96.0	95.2	183	180	98.4	91.4
Lempira	412	392	95.1	94.8	372	333	89.5	80.5
Olancho	178	152	85.4	84.5	161	150	93.2	90.0
Valle	133	129	97.0	91.8	30	30	100.0	94.3
Intervention	1667	1540	92.4	91.5	1770	1683	95.1	91.6
Comparison	1574	1458	92.6	90.9	800	756	94.5	89.3

*Response rate calculated as the number of complete or partial interviews over total selected households

Table 1.4: Women participating in SMI women's health and/or pregnancy interview, by department

	Baseline 2013				Second Follow-Up 2017			
	No. women eligible	No. women interviewed	Woman response rate, %	Overall response rate, %	No. women eligible	No. women interviewed	Woman response rate, %	Overall response rate, %
Choluteca	541	441	81.5	73.1	521	521	100.0	95.0
Comayagua	287	261	90.9	85.6	158	158	100.0	91.3
Copán	1218	1119	91.9	87.7	937	932	99.5	90.2
Cortés	667	500	75.0	65.4	360	356	98.9	91.5
Intibucá	360	306	85.0	69.9	254	254	100.0	97.1
La Paz	155	148	95.5	90.9	224	224	100.0	91.4
Lempira	551	479	86.9	82.4	405	405	100.0	80.5
Olancho	209	168	80.4	67.9	207	206	99.5	89.5
Valle	196	158	80.6	74.0	43	43	100.0	94.3
Intervention	2138	1868	87.4	80.0	2127	2124	99.9	91.4
Comparison	2046	1712	83.7	76.1	982	975	99.3	88.6

*Response rate calculated as the number of complete or partial interviews over total eligible women. All children aged 0-59 months who reside in interviewed households, based on the household roster completed as part of the SMI census, are selected for the caregiver interview and physical measurements.

Table 1.5: Children participating in SMI child health interview and/or physical measurements by department

	Baseline 2013				Second Follow-Up 2017			
	No. children eligible	No. children participated	Child response rate, %	Overall response rate, %	No. children eligible	No. children participated	Child response rate, %	Overall response rate, %
Choluteca	388	369	95.1	85.3	417	417	100.0	95.0
Comayagua	247	245	99.2	93.4	125	125	100.0	91.3
Copán	1060	1020	96.2	91.9	824	818	99.3	90.0
Cortés	498	453	91.0	79.3	306	304	99.3	91.9
Intibucá	274	264	96.4	79.2	191	191	100.0	97.1
La Paz	128	126	98.4	93.8	179	179	100.0	91.4
Lempira	422	404	95.7	90.8	273	273	100.0	80.5
Olancho	162	152	93.8	79.3	155	155	100.0	90.0
Valle	123	110	89.4	82.1	30	30	100.0	94.3
Intervention	1690	1622	96.0	87.8	1726	1722	99.8	91.3
Comparison	1612	1521	94.4	85.8	774	770	99.5	88.8

*Response rate calculated as the number of complete or partial interviews over total eligible women. All women aged 15-49 years who reside in interviewed households, based on the household roster completed as part of the SMI census, are selected for the interview.

1.5 Characteristics of Non-Participating Households

Data on selected households that were absent or declined to participate in the SMI Household Survey are drawn from the SMI Household Census. A total of 245 of the 2,570 households that were selected at the second follow-up did not complete the SMI Household Survey. Households that did not complete the SMI Household Survey are referred to as “replaced” households because they were substituted with alternate households selected from the same segment.

Replaced households consisted of one to 14 members (median four members). Four percent of these households were headed by a man, 26.5% of households were headed by a woman, and 68.9% were identified as dual-headed.

Table 1.6: Household characteristics, nonparticipating households

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Head of household						
Dual-headed household	202	82.4	2.4	91	68.9	4.2
Single head, female	37	15.1	2.4	35	26.5	3.6
Single head, male	6	2.4	1.0	6	4.5	2.0

Dual-headed households are those where (a) two individuals were identified as ”head” by the respondent or (b) both the person identified as ”head” and his or her spouse or partner are household members.

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Number of usual household members	245	0	1	4	5	6	13
Second follow-up 2017							
Number of usual household members	132	0	1	3	4	5	14

1.6 Report structure

The subsequent chapters present characteristics of the surveyed SMI-Honduras sample in intervention areas only. Each table is presented for comparison areas only in Appendix D, and pooled intervention and comparison areas in Appendix E. Most tables take one of three forms. Tabulations of select-only-one question types are similar to Table 2.2(a). The categories are mutually exclusive, so the proportions sum to 100%. Counts are shown for non-response ("Don't know" or "Decline to respond" recorded), but these cases are always excluded from the denominator.

Tabulations of select-all-that-apply question types look like Table 2.4(a). As respondents can report more than one option, categories are not mutually exclusive, and thus proportions do not sum to 100%. The table shows affirmative cases (n) and non-missing cases (N). Non-response is the difference between non-missing cases (N) and the total sample eligible for that section of the questionnaire, indicated at the start of the chapter. Where statistics are reported for subpopulations, the size of the subpopulation is reported in the same table or the preceding table for straightforward comparison.

Tabulations of continuous variables, where respondents were requested to provide a numeric response, appear similar to Table 2.2(b) and present the range and quartiles (25th percentile, median, 75th percentile) in order to illustrate the distribution of responses across the sample. Counts of non-response are listed in the table and excluded from the count of non-missing cases (N).

2 CHAPTER 2: CHARACTERISTICS OF HOUSEHOLDS

This chapter provides a descriptive summary of the basic demographic, socioeconomic, and environmental characteristics of the households sampled for the SMI-Honduras Baseline and Second Follow-up Household Survey.

2.1 Characteristics of Participating Households

A total of 1,683 households in the Honduras second follow-up completed the household characteristics questionnaire. In the baseline, 1,525 completed the survey. The remainder of this chapter is dedicated to a summary of the basic demographic, socioeconomic, and environmental characteristics of the households completing the household characteristics questionnaire.

2.2 Age and Sex Composition, SMI Census

The unweighted distribution of the de facto household population in the surveyed households in the SMI-Honduras household census by five-year age groups and by sex is shown for baseline (Figure 2.1) and second follow-up (Figure 2.2). Honduras has a larger proportion of its population in the younger age groups than in the older age groups. Figure 2.2 indicates that in the second follow-up, just under 35% of the population in the Second Follow-up is under age 15 years, more than half (59%) of the population is in the economically productive age range (15-64), and the remaining 6% is age 65 and above.

Figure 2.1: Age and sex of census sample, unweighted percent distribution of de facto household population by five-year age groups, baseline survey

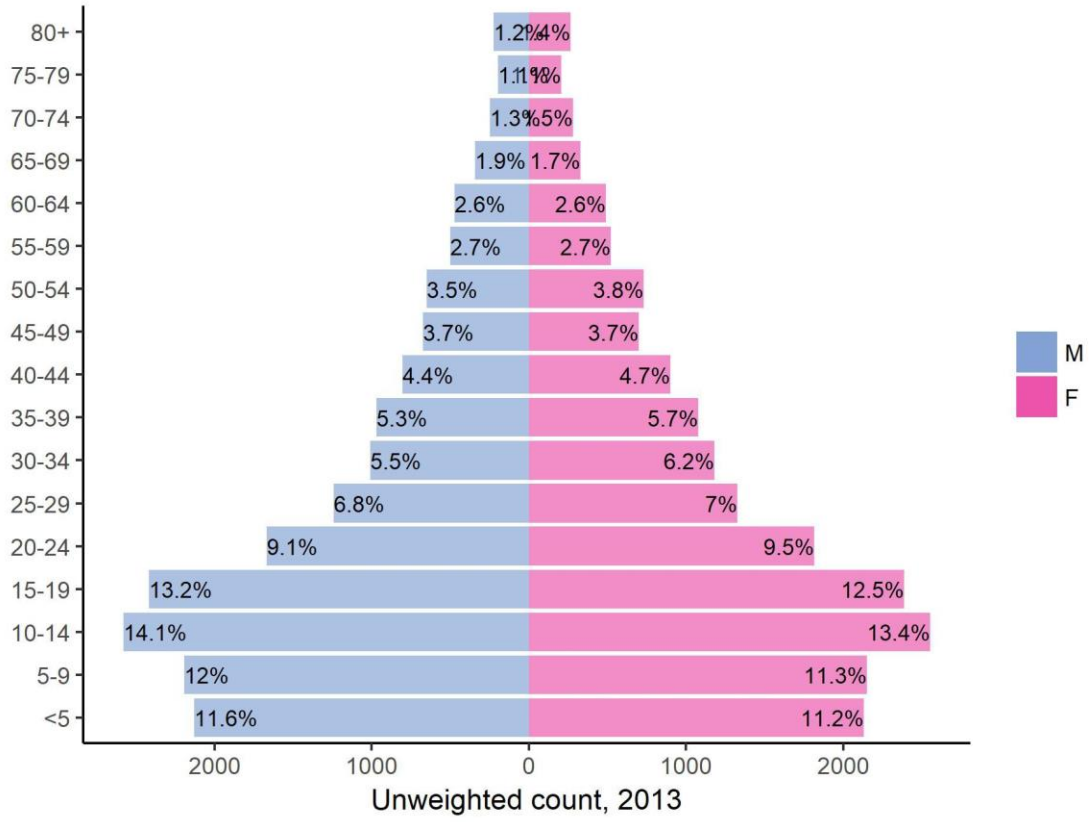
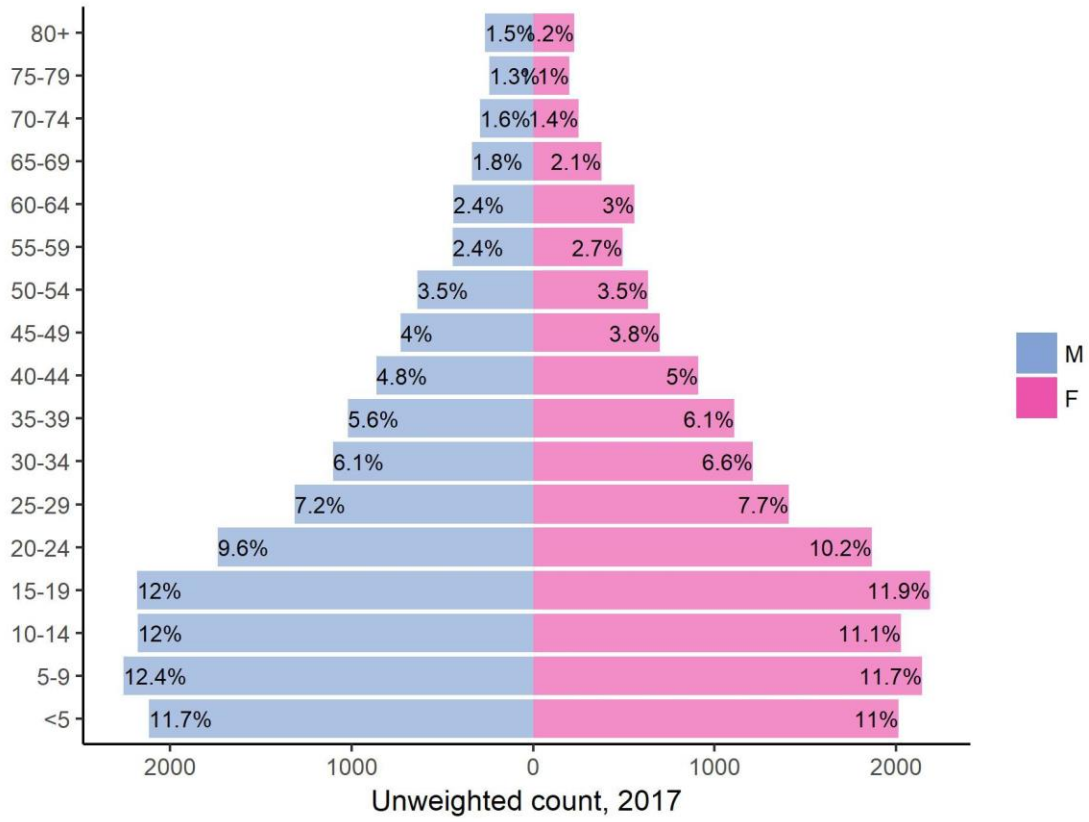


Figure 2.2: Age and sex of census sample, unweighted percent distribution of de facto household population by five-year age groups, follow-up survey



2.3 Household Characteristics, SMI Household Survey

The number of households, women and children in the sample are displayed in Table 2.1; and the percent distribution of households by head of household, number of usual members, and marital status are shown in Table 2.2.

Seventy seven percent of households in Honduras identify as dual-headed in the second follow-up. Males are the head of the household in 6.9% of surveyed households in Honduras, with females as the head of household in the remaining 16.4%. The median household size in Honduras is five members, with another 15% of households having six or more members.

Table 2.1: SMI household survey sample sizes: number of total households, women 15-49 years of age, and children 0-59 months

	Baseline 2013	Second Follow-Up 2017
Households	1525	1683
Women	1868	2124
Children	1622	1722

Table 2.2: Household characteristics, SMI household sample

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Head of household						
Dual-headed household	1219	80.0	1.4	1267	76.7	1.7
Single head, female	257	16.8	1.3	292	16.4	1.4
Single head, male	49	3.2	0.5	124	6.9	1.0

Dual-headed households are those where (a) two individuals were identified as "head" by the respondent or (b) both the person identified as "head" and his or her spouse or partner are household members

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Number of usual household members	1525	0	1	4	5	7	14
Second follow-up 2017							
Number of usual household members	1683	0	1	4	5	6	17

2.4 Drinking Water Access and Treatment

2.4.1 *Sanitation facilities and waste disposal*

A household's source of drinking water is an important determinant of the health status of household members. Contaminated drinking water can spread waterborne diseases, such as diarrhea or dysentery. Piped water, protected wells, and protected springs are expected to be relatively free of these diseases; whereas other sources like unprotected wells, rainwater, or surface water are more likely to carry disease-causing agents.

The percent distribution of households by source of drinking water, location of water source, and information about sanitation facilities is shown in Table 2.3. The majority of surveyed households (71%) have water piped to dwelling, and 29% of households have to go outside their home or yard to a water source.

Many households (36.4%) use a pour flush toilet and 29.7% of households use a flush toilet. Fifteen percent of households report having no toilet, compared to 18.9% at baseline.

Table 2.3: Household water source and sanitation facilities

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Household water source						
Piped to dwelling	1204	79.5	2.6	1203	71.0	3.2
Piped to yard/plot	99	6.4	1.3	261	16.6	2.9
Protected dug well	28	1.8	0.6	80	4.3	1.5
Unprotected dug well	27	1.7	0.6	42	2.5	0.8
Bottled water	29	1.5	0.6	24	1.3	0.5
Protected spring	6	0.3	0.2	17	0.9	0.4
Unprotected spring	20	1.3	0.4	12	0.6	0.3
Tubewell/borehole	35	2.1	0.8	7	0.4	0.2
Rainwater collection	0	0.0	0	5	0.4	0.2
Public tap/standpipe	0	0.0	0	4	0.2	0.1
Surface water	23	1.5	0.4	2	0.2	0.1
Water jug	8	0.6	0.3	3	0.2	0.1
Tanker truck	2	0.1	0.1	0	0.0	0
Cart with small tank/drum	0	0.0	0	0	0.0	0
Other	44	3.2	0.7	23	1.4	0.4
Don't know	0	0	0	0	0	0
Decline to respond	0	0	0	0	0	0
Time it takes to retrieve water (min)						
Water on premises	1376	90.5	1.8	1569	93.9	1.4
Less than 30 minutes	124	8.2	1.5	96	5.5	1.3
30 minutes or longer	20	1.3	0.4	13	0.6	0.4
Don't know	5	0	0	5	0	0
Decline to respond	0	0	0	0	0	0
Sanitation facilities						
Pour flush toilet	596	40.1	2.6	589	36.4	2.6
Flush toilet	372	22.5	2.7	538	29.7	2.8
Pit latrine	273	17.3	2.7	289	16.5	2.6
No toilet	266	18.9	2.0	217	14.7	2.5
Dry toilet	12	0.9	0.3	29	1.5	0.4
Other	5	0.3	0.1	20	1.2	0.4
Don't know	1	0	0	1	0	0
Decline to respond	0	0	0	0	0	0

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Shared toilet/facilities	118	1253	9.7	1	142	1445	10.1	1.1

2.4.2 *Cooking fuel sources*

Cooking fuel source and the location for cooking food are included in Table 2.4. The percentage of households with a separate kitchen is also shown. The two most commonly reported cooking fuel sources used in households during the second follow-up are wood (92.8%) and electricity (8.1%). Among those

households with non-missing responses as to what cooking fuel sources they use, 77.5% report normally cooking food in the house, 12.3% normally cook food in a separate building, and 10.2% normally cook food outdoors. Seventy nine percent of households have a separate kitchen.

Table 2.4: Cooking fuel source and cooking location

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Wood	1376	1525	91.6	1.4	1534	1683	92.8	1.3
Electricity	162	1525	9.8	1.3	162	1683	8.1	1.6
Gas tank	130	1525	7.4	1.6	122	1683	6.1	1.0
Straw/twigs/grass	0	1525	0.0	0	16	1683	1.0	0.4
Coal	10	1525	0.7	0.2	5	1683	0.3	0.1
Agricultural crops	0	1525	0.0	0	0	1683	0.0	0
No food cooked at home	0	1525	0.0	0	1	1683	0.0	0
Other	2	1525	0.1	0.1	0	1683	0.0	0

*categories not mutually exclusive (select all that apply)

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Location for cooking food, if cooking fuel source reported						
Inside house	1129	74.3	2.3	1318	77.5	2.5
In a separate building	197	13.1	1.5	200	12.3	1.4
Outdoors	194	12.6	1.3	165	10.2	1.4
Other	1	0.1	0.1	0	0.0	0
Don't know	0	0	0	0	0	0
Decline to respond	1	0	0	0	0	0

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Separate kitchen, if cooking fuel source reported and food cooked in the home	911	1125	80.5	1.9	1048	1318	79.3	1.9

2.4.3 *Household wealth*

The median number of bedrooms per household is less than two (Table 2.5). Sixteen percent of households in the second follow-up own agricultural land and 20.7% of households rent agricultural land (Table 2.6).

The availability of durable consumer goods is a good indicator of a household's socioeconomic status. Table 2.6 shows the availability of selected consumer goods by household. The large majority of households (75.6%) have electricity, and the most commonly owned items are mobile phone (74.3%), television (51.6%), and radio (48.6%). Many households (16.7%) own a bicycle and 13.9% own a motorcycle/scooter.

Table 2.5: Number of bedrooms per household

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Number of bedrooms	1523	1	0	1	2	2	6
Second follow-up 2017							
Number of bedrooms	1683	0	0	1	2	2	7

Table 2.6: Household assets

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Household assets								
Electricity	1074	1524	69.2	4.6	1303	1683	75.6	3.3
Mobile phone	1135	1525	72.4	2.6	1257	1682	74.3	2.6
Television	835	1525	52.1	3.5	915	1683	51.6	3.4
Radio	1021	1525	67.6	2.0	814	1683	48.6	1.6
Refrigerator	539	1524	32.8	3.1	603	1682	32.8	3.1
Sound system	426	1525	25.2	2.3	366	1683	20.7	2.1
Watch	409	1525	24.4	1.8	330	1683	18.1	1.6
Bank account	223	1504	13.3	1.4	230	1673	13.4	1.3
Guitar	66	1525	4.0	0.6	62	1682	3.8	0.5
Computer	106	1524	5.7	1.0	69	1679	3.5	0.7
Washing machine	58	1524	3.0	0.8	58	1682	2.7	0.6
Landline phone	81	1525	4.0	1.0	23	1677	1.1	0.4
Transportation assets								
Bicycle	312	1525	18.8	2.0	291	1682	16.7	1.9
Motorcycle/scooter	116	1525	7.2	1.1	235	1683	13.9	1.7
Car	159	1524	10.0	1.1	140	1683	8.0	1.2
Truck	12	1524	0.8	0.3	15	1682	0.8	0.2
Animal cart	8	1525	0.4	0.2	8	1683	0.4	0.1
Agricultural assets: Livestock ownership								
Chickens	1075	1525	70.7	2.8	1134	1682	68.4	2.7
Horses, donkeys, or mules	265	1524	17.5	1.8	222	1683	13.1	1.5
Pigs	243	1525	15.6	2.2	200	1683	12.0	1.5
Cattle	174	1523	10.6	1.2	132	1683	7.3	1.0
Sheep or goats	8	1524	0.4	0.2	7	1683	0.4	0.2

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Agricultural assets: Own or rent agricultural land						
No agricultural land	850	55.5	2.8	1050	61.5	2.7
Owns agricultural land	378	25.9	1.8	256	16.2	2.0
Rents agricultural land	276	18.1	2.1	350	20.7	2.2
Shared/community-held land	7	0.5	0.2	25	1.6	0.7
Don't know	10	0	0	2	0	0
Decline to respond	4	0	0	0	0	0

2.5 Household expenditure

2.5.1 *Total expenditures by type*

Households are surveyed about the amount of money spent over the last month. After reporting total household expenditures, households are then asked how much was spent on specific categories (e.g., food, housing, education, and medical care) over the last four weeks. Table 2.7 shows the itemized monthly expenditure per person living in the household summarized by expenditure quintile. All data are presented in current Lempira (L). Itemized expenditure information was sufficiently complete to report for 1555 households at the second follow-up. The lowest quintile in the study area spent less than 328 L per person over the last month in the second follow-up.

Table 2.8 shows the budget share, defined as the weighted average expenditure on each category across a quintile divided by the weighted average total itemized household expenditure in the same quintile. Table 2.8 shows that the poorest 20% of households in the study area spend 75.5% of their monthly expenditure on food, on average. In comparison, the wealthiest households spend 57% on food. The poorest households spent 1.8% of their expenditure on medical care, while the wealthiest spent 12.4%.

Table 2.7: Total itemized per- capita expenditure quintiles, Honduras Lempira

	N	DK/DTR	p20	p40	p60	p80
Baseline 2013						
Per capita monthly household expenditure, current LCU	1333	1	280	430	610	949
Second follow-up 2017						
Per capita monthly household expenditure, current LCU	1555	2	328	546	811	1238

Table 2.8: Itemized household expenditure by total household budget share

	Bottom quintile	2nd quintile	3rd quintile	4th quintile	Top quintile
Baseline 2013					
Food	83.3	75.5	75.7	70.1	60.9
Alcoholic beverages and tobacco	0.4	0.8	0.4	1.1	1.1
Education expenses	4.2	3.8	3.0	4.5	3.0
Furniture and domestic appliances	0.2	0.6	0.5	0.6	1.5
Recreation	0.0	0.1	0.1	0.1	0.2
Housing and utilities	3.0	3.7	5.0	5.5	6.1
Clothing and shoes	2.1	5.7	6.6	6.6	7.7
Transportation	2.1	4.7	3.4	3.7	5.7
Communication	2.4	3.0	2.2	3.0	2.7
Out-of-pocket medical expenses	2.4	1.7	2.8	4.7	10.4
Social security premiums	0.0	0.0	0.0	0.0	0.1
Private insurance premiums	0.0	0.0	0.0	0.0	0.1
Other costs to access health care	0.0	0.2	0.2	0.1	0.4
Second Follow-Up 2017					
Food	75.5	78.4	71.5	68.2	57.0
Alcoholic beverages and tobacco	0.3	0.7	1.0	0.4	0.8
Education expenses	6.3	5.0	5.6	5.2	4.7
Furniture and domestic appliances	0.3	0.2	0.1	0.4	1.7
Recreation	0.2	0.1	0.0	0.2	0.7
Housing and utilities	9.6	6.8	8.9	9.3	9.8
Clothing and shoes	1.9	3.2	5.4	7.8	6.5
Transportation	2.1	2.2	2.8	3.0	4.3
Communication	2.1	1.5	1.9	2.0	2.0
Out-of-pocket medical expenses	1.8	1.8	2.8	3.4	12.4
Social security premiums	0.0	0.1	0.0	0.0	0.1
Private insurance premiums	0.0	0.0	0.0	0.0	0.0
Other costs to access health care	0.0	0.0	0.0	0.0	0.1

2.5.2 Health expenditures

Of the 1555 households with expenditure data at the second follow-up, 278 reported having health expenditures in the last four weeks. Table 2.9 shows health expenditure by type among households reporting non-zero out-of-pocket health expenditure. Very few households had spending in each category.

Table 2.9: Out-of-pocket medical expenditures by type, last four weeks, Honduras Lempira

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Care that required overnight stay in hospital/clinic	325	1	0	0	0	0	50000
Care by health professionals not requiring overnight stay	326	0	0	0	0	0	25000
Diagnostic and laboratory tests, X-rays, blood tests	326	0	0	0	0	0	7000
Other costs associated with overnight stay in hospital/clinic	325	1	0	0	0	0	4000
Medications prescribed by health personnel	325	1	0	0	98.5	500	4000
Dentists	326	0	0	0	0	0	3000
Care or non-prescription medications from pharmacist	326	0	0	0	0	0	3000
Other health care products or services	326	0	0	0	0	0	2000
Health products (glasses, hearing aids, prosthetics, etc.)	326	0	0	0	0	0	1500
Care by traditional/alternative healers/birth attendants	326	0	0	0	0	0	600
Second Follow-Up 2017							
Care that required overnight stay in hospital/clinic	278	0	0	0	0	0	5000
Care by health professionals not requiring overnight stay	274	4	0	0	0	0	2500
Diagnostic and laboratory tests, X-rays, blood tests	274	4	0	0	0	0	2000
Other costs associated with overnight stay in hospital/clinic	278	0	0	0	0	0	20000
Medications prescribed by health personnel	277	1	0	0	0	627.9	7000
Dentists	277	1	0	0	0	0	600
Care or non-prescription medications from pharmacist	278	0	0	0	0	50	6000
Other health care products or services	278	0	0	0	0	0	8000
Health products (glasses, hearing aids, prosthetics, etc.)	278	0	0	0	0	0	1300
Care by traditional/alternative healers/birth attendants	277	1	0	0	0	0	400

2.5.3 Source of health expenditure financing

Of the 1555 households with expenditure data at the second follow-up, 110 reported that members of the household went to a hospital and stayed overnight at least once during the last 12 months and paid for expenses associated with the overnight stays. The maximum paid for a hospital stay was 5000 L.

Table 2.10 shows the source and amount of financing for medical expenditures for overnight hospital stays. No single funding source was used by more than about 25% of households with hospital stays.

Table 2.10: Health care financing by source, last 12 months, Honduras Lempira

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Loan from a source other than family or friends	168	0	0	0	0	0	35000
Remittances from family or friends abroad	168	0	0	0	0	0	30000
Any household member's current income	167	1	0	0	0	1000	22000
Savings	167	1	0	0	0	0	20000
Money from relatives or friends outside the household	168	0	0	0	0	0	18000
Social security payments	167	1	0	0	0	0	7000
Property sold	168	0	0	0	0	0	6000
Items sold	167	1	0	0	0	0	5000
Reducing other household spending	168	0	0	0	0	0	3000
Other source	167	1	0	0	0	0	3000
Political donations or grants	168	0	0	0	0	0	350
Health insurance plan payment/reimbursement	167	1	0	0	0	0	0
Conditional cash transfer programs	168	0	0	0	0	0	0
Second Follow-Up 2017							
Loan from a source other than family or friends	110	0	0	0	0	0	2e+05
Remittances from family or friends abroad	110	0	0	0	0	0	30000
Any household member's current income	110	0	0	0	0	0	15000
Savings	110	0	0	0	0	2000	5e+05
Money from relatives or friends outside the household	110	0	0	0	0	0	2e+05
Social security payments	110	0	0	0	0	0	5000
Property sold	110	0	0	0	0	0	50000
Items sold	110	0	0	0	0	0	1000
Reducing other household spending	110	0	0	0	0	0	2500
Other source	110	0	0	0	0	0	3000
Political donations or grants	110	0	0	0	0	0	0
Health insurance plan payment/reimbursement	110	0	0	0	0	0	5000
Conditional cash transfer programs	110	0	0	0	0	0	12000

3 CHAPTER 3: GENERAL CHARACTERISTICS OF RESPONDENTS

This chapter summarizes the demographic characteristics, socioeconomic status, and health status of women of reproductive age (15-49 years) participating in the SMI-Honduras second follow-up household survey.

3.1 Demographic Characteristics

3.1.1 *Age, marital status, relation to head of household*

The age distribution of the de facto population of women of reproductive age participating in the women's health or pregnancy interviews in Honduras is shown in Figure 3.1 by five-year age groups. About 60% of all women participating in the second follow-up SMI-Honduras household survey were younger than 30 years of age, 27% were between the ages of 30 and 39, and 13% were between the ages of 40 and 49. While 25% of women reported being married and 44% being partnered, 27% indicated they were never married. Twenty percent of women were reported at the SMI-Honduras census to be the head of household, 30.1% to be the spouse of the head of the household, and 26.8% to be the biological child of the head of the household.

Figure 3.1: Age of respondents, unweighted

One woman who participated in the baseline interview was excluded because she was unable to provide her age or an estimate of her age.

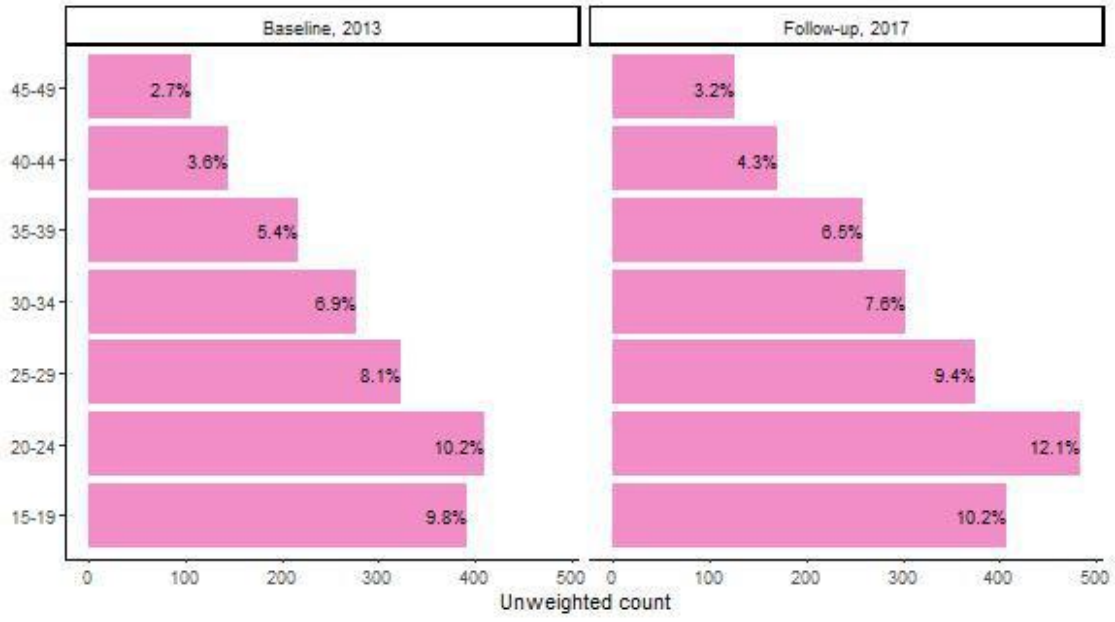


Table 3.1: Demographic characteristics of respondents

	Baseline 2013		Second Follow-Up 2017	
	n	%	n	%
Marital status				
Single	577	30.9	604	28.4
Married	563	30.1	516	24.3
Civil union/partnered	657	35.2	906	42.7
Divorced	1	0.1	4	0.2
Separated	50	2.7	74	3.5
Widowed	19	1.0	20	0.9
Other	1	0.1	0	0.0
Don't know	0	0.0	0	0.0
Decline to respond	0	0.0	0	0.0
Respondent's relationship to head of household				
Head of household	169	9.0	431	20.3
Spouse	530	28.4	639	30.1
Biological child	487	26.1	570	26.8
Adopted or stepchild	13	0.7	17	0.8
Grandchild	35	1.9	48	2.3
Niece/nephew	13	0.7	11	0.5
Parent	3	0.2	0	0.0
Sibling	17	0.9	11	0.5
Daughter-in-law/son-in-law	108	5.8	97	4.6
Sister-in-law/brother-in-law	12	0.6	5	0.2
Grandparent	0	0.0	0	0.0
Mother-in-law/father-in-law	0	0.0	2	0.1
Other relative	9	0.5	9	0.4
Unrelated person	16	0.9	13	0.6
Partner	452	24.2	261	12.3
0	3	0.2	7	0.3
Other	1	0.1	3	0.1
Don't know	0	0.0	0	0.0
Decline to respond	0	0.0	0	0.0

*At baseline, marital status is reported by the respondent in the Census. In the second follow-up, marital status is reported by the woman at the start of the Household Survey
* "-" represents women who were missed in the census and added individually into the household survey, so relationship to the head of household was not registered.

3.2 Education Attainment and Literacy

Eighty eight percent of second follow-up survey participants had some formal education (Table 3.2). For 69.2% of these women, the highest level of education completed was primary schooling. Literacy was assessed by asking respondents to read from a card the following sentence: "La salud del niño es muy importante para su desarrollo en la vida." Seventy six percent of women surveyed were able to read the whole sentence. Fourteen percent of women could not read the sentence at all.

Table 3.2: Education attainment and literacy

		Baseline 2013			Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Ever attended school	1685	1846	89.2	1.4	1932	2124	88.5	1.7
Attended literacy course	362	1847	20.8	2.4	247	2117	10.7	1.4

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Educational attainment and literacy						
Primary	1240	70.2	3.0	1304	69.2	3.1
Secondary	201	12.5	1.4	292	13.5	1.5
High school	208	15.4	2.1	265	13.2	2.1
University	33	1.9	0.6	69	4.2	1.3
Don't know	3	0	0	2	0	0
Decline to respond	0	0	0	0	0	0
Literacy						
Can read entire sentence	1212	65.1	2.6	1642	75.8	2.6
Cannot read at all	240	15.6	1.9	243	13.7	1.9
Can read parts	386	19.0	1.6	229	10.4	1.3
Visually impaired	4	0.4	0.3	6	0.2	0.1
Don't know	4	0	0	4	0	0
Decline to respond	1	0	0	0	0	0

3.3 Employment

As summarized in Table 3.3, the vast majority of respondents in the second follow-up were homemakers (76.3%). Of the 203 women who reported being employed and working at the time of the interview, most (91.2%) identified "Employee" as their occupational role.

Table 3.3: Employment

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Employment status						
Homemaker	1526	80.4	2.5	1701	76.3	2.4
Employed/paid for work	182	11.7	2.3	203	9.7	1.3
Student	105	5.8	1.0	135	8.5	1.5
Self-employed	0	0.0	0	58	4.0	0.8
Employed, but did not work in last week	3	0.1	0.1	6	0.7	0.4
Employed by a family member without pay	19	1.3	0.4	15	0.4	0.2
Retired	2	0.1	0.0	2	0.2	0.2
Unable to work due to disability	7	0.7	0.4	3	0.2	0.2
Don't know	3	0	0	0	0	0
Decline to respond	0	0	0	1	0	0
Occupational role, among women employed and being paid for work						
Employee	157	82.9	5.5	190	91.2	4.5
Proprietor	12	8.8	4.0	7	7.3	4.6
Independent contractor	6	1.3	0.6	5	1.6	0.8
Employer	7	7.0	3.9	0	0.0	0
Don't know	0	0	0	1	0	0
Decline to respond	0	0	0	0	0	0

* Self-employed option was not included in the baseline survey

3.4 Exposure to Mass Media

Respondents were asked about their exposure to newspapers, radio, and television. As displayed in Table 3.4, among women who demonstrated full or partial literacy in the second follow-up, 22.3% had weekly exposure to newspapers. Forty eight percent of all women had weekly exposure to radio, and 55.2% had weekly exposure to television.

Table 3.4: Exposure to mass media

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Newspapers, among literate women						
Never	580	34.3	2.6	1145	59.7	2.6
At least once a week	548	36.5	2.6	388	22.3	2.3
Less than once a week	428	29.2	2.4	334	18.0	1.6
Don't know	5	0	0	3	0	0
Decline to respond	0	0	0	0	0	0
Not applicable	37	0	0	1	0	0
Radio						
At least once a week	1196	66.0	1.9	993	47.8	2.2
Never	287	15.5	1.5	766	36.0	2.2
Less than once a week	350	18.4	1.6	353	16.2	1.4
Don't know	0	0	0	4	0	0
Decline to respond	0	0	0	0	0	0
Not applicable	14	0	0	8	0	0
Television						
At least once a week	978	53.9	3.3	1142	55.2	3.2
Never	615	33.8	3.6	773	35.4	3.5
Less than once a week	221	12.3	1.2	192	9.4	1.1
Don't know	1	0	0	7	0	0
Decline to respond	0	0	0	0	0	0
Not applicable	32	0	0	10	0	0

3.5 Access to Health Services

3.5.1 *Proximity to health care facilities*

Table 3.5 - Table 3.7 display the responses to several survey questions that were used to assess access to health care facilities. Respondents were asked to estimate proximity to health care facilities in terms of distance (kilometers) and travel time. Not surprisingly, respondents typically had more difficulty estimating distance to health care facilities. As shown in the tables below, "Don't know" responses to the distance questions were exceedingly common.

Excluding the 805 women who were unable to estimate the distance to the closest health facility in the second follow-up, 75% of women reported living 5 kilometers or less from a health facility (Table 3.5). Three-quarters of the sample indicated that it took less than 60 minutes to reach this facility by the usual means of transportation. One-quarter estimated the travel time from their household to the closest health facility to be 60 minutes or more.

Women were also asked for the travel distance and time to their usual health facility, if they had a usual health facility. Excluding the 678 women who did not know the distance to the facility in the second follow-up, three-quarters of the women reported traveling up to 5 kilometers, and three-quarters of the women could travel to the closest facility in less than 30 minutes (Table 3.6).

Of the 1,432 women who reported a recent health facility visit for themselves or for family members in the second follow-up, three-quarters traveled less than 5 kilometers for care. Twenty-five percent of women traveled 5 to 300 kilometers for care. Half of women traveled for less than 30 minutes, and one-quarter spent 60 minutes or more traveling for care. The longest travel time reported for a recent illness was approximately 40 hours.

Table 3.5: Proximity to health care facilities: nearest health facility

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Distance, km	468	1379	0	1	2	5	60
Travel time, min	1772	26	1	10	20	60	5400
Second Follow-Up 2017							
Distance, km	1319	805	0	1	2	5	200
Travel time, min	2042	12	1	10	30	60	2700

Table 3.6: Proximity to health care facilities: usual health facility

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Distance, km	438	1271	0	1	2	4.9	100
Travel time, min	1186	13	1	5	15	30	45
Second Follow-Up 2017							
Distance, km	1155	678	0	1	2	5	200
Travel time, min	1204	11	1	10	15	30	50

Table 3.7: Proximity to health care facilities: health facility for recent illness

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Distance, km	312	730	0	1	2	5	68
Travel time, min	1010	4	1	10	20	60	1800
Second Follow-Up 2017							
Distance, km	908	513	0	1	2	5	300
Travel time, min	1383	9	1	10	30	60	2400

3.6 Health Status

3.6.1 *Current health status*

Table 3.8 shows the self-rated current health status of all women participating in the survey. When asked to evaluate their current health status relative to the past year, 50.4% reported that their health was "about the same" in the second follow-up. While 39.2% reported that their health had improved, 10.4% reported worse health on the day of the interview, compared to last year. Eighty two percent could "easily" perform their daily activities (e.g., work, housework, and childcare). About 18% of women reported at least some degree of difficulty performing these tasks that was related to their health status.

Table 3.8: Current health status

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Current health relative to last year						
Better	728	40.1	2.1	829	39.2	1.8
Worse	146	9.6	1.2	231	10.4	1.1
About the same	969	50.3	2.2	1062	50.4	1.9
Don't know	4	0	0	2	0	0
Decline to respond	0	0	0	0	0	0
Ability to perform daily activities						
Easily	1661	88.4	1.4	1743	82.4	1.6
With some difficulty	167	10.3	1.2	335	15.4	1.4
With much difficulty	18	1.3	0.5	45	2.1	0.6
Unable to do	1	0.0	0	0	0.0	0
Don't know	0	0	0	1	0	0
Decline to respond	0	0	0	0	0	0

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Days in the last month that physical health was not good						
No days	1492	77.7	2.1	1467	67.7	1.9
1 to 3 days	105	5.1	0.7	261	11.8	1.3
4 to 7 days	244	17.2	1.9	394	20.5	1.5
7 to 29 days	0	0.0	0	0	0.0	0
All month	0	0.0	0	0	0.0	0
Don't know	6	0	0	2	0	0
Decline to respond	0	0	0	0	0	0
Days in the last month that mental health was not good						
No days	1593	84.4	1.7	1709	77.8	1.7
1 to 3 days	99	6.2	0.9	158	8.4	1.0
4 to 7 days	151	9.4	1.3	251	13.7	1.4
7 to 29 days	0	0.0	0	0	0.0	0
All month	0	0.0	0	0	0.0	0
Don't know	4	0	0	5	0	0
Decline to respond	0	0	0	1	0	0

3.6.2 *Recent illness*

Women were asked a series of questions about any illnesses or health problems they had in the two weeks preceding the interview. Out of the women in the second follow-up, 17.5% reported being sick during that time (Table 3.9). Of the 324 women who reported a recent illness, headache (25.5%), cough (11%), fever (10.6), and abdominal pain (9.4%) were the most commonly elicited specific complaints. Thirty percent of women specified a different health problem not listed in the questionnaire.

Table 3.9: Recent illness (in the last two weeks)

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Respondent was sick during the past two weeks	403	1847	24.3	2	324	2122	17.5	1.5

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Type of illness, among those sick in the past two weeks						
Headache	112	27.9	3.5	78	25.5	3.3
Cough	52	11.1	2.4	42	11.0	2.5
Fever	51	11.7	2.4	41	10.6	2.5
Abdominal pain	29	7.8	2.2	31	9.4	2.5
Swelling in legs, ankles, or feet	0	0.0	0	7	2.5	1.2
Gynecologic problem	9	1.8	0.7	9	2.4	1.1
Obstetric problem	2	0.3	0.2	1	2.3	2.3
Skin rash/infection	7	1.0	0.4	4	2.1	1.3
Anemia	1	0.1	0.1	1	1.0	1.0
Stroke	0	0.0	0	1	1.0	1.0
Bronchitis	0	0.0	0	1	0.6	0.6
Toothache	6	0.7	0.3	3	0.5	0.3
Asthma	7	3.6	2.0	2	0.3	0.3
Eye/ear infection	5	0.5	0.2	2	0.3	0.2
Hypertension	9	3.7	1.9	2	0.3	0.2
Diabetes	4	1.9	1.2	2	0.3	0.2
Diarrhea with vomiting	3	0.3	0.2	1	0.1	0.1
Malaria	0	0.0	0	0	0.0	0
Tuberculosis	0	0.0	0	0	0.0	0
Pneumonia	0	0.0	0	0	0.0	0
Diarrhea without blood	5	0.7	0.3	0	0.0	0
Diarrhea with blood	1	1.0	1.0	0	0.0	0
Vomiting	3	0.4	0.2	0	0.0	0
Measles	0	0.0	0	0	0.0	0
Jaundice	0	0.0	0	0	0.0	0
HIV/AIDS	0	0.0	0	0	0.0	0
Paralysis	0	0.0	0	0	0.0	0
Chest infection	0	0.0	0	0	0.0	0
Blood in urine	0	0.0	0	0	0.0	0
Other	94	25.5	3.7	95	29.9	4.0
Don't know	1	0	0	1	0	0
Decline to respond	2	0	0	0	0	0

Options for "Swelling in legs, ankles, or feet", "Blood in urine", and "Chest infection" were available only in the follow-up survey. In the baseline, "Chest infection" was included within the "Cough" answer choice.

3.6.3 *Utilization of health services*

Table 3.10 summarizes data regarding the utilization of health services among the 324 women who reported an illness in the two weeks preceding the second follow-up interview. One hundred twelve (38.1%) of these women sought care at a health care facility. Many of these women attended a CESAMO health unit (62.3%); another 21.4% attended a CESAR clinic. Only two women were hospitalized for their recent illness (8.1% of those who sought care).

Table 3.10: Utilization of health services for illness in the last two weeks

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Sought care for recent illness	136	403	31.5	3.6	112	324	38.1	4.9
Admitted to hospital for care*	0	31	0.0	0	2	23	8.1	6.1

Among women who sought care at a public or private hospital, health center/clinic, mobile clinic, or other health facility; public health unit; private office; or pharmacy

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Type of facility where care was sought						
CESAMO	39	26.2	6.3	63	62.3	8.4
CESAR	62	41.6	7.5	24	21.4	8.4
Private health clinic	5	4.0	2.4	7	7.1	3.9
Public hospital	6	2.7	1.3	5	4.3	2.3
Private doctor's office	10	13.6	5.4	9	3.5	1.4
Private hospital	3	1.8	1.2	1	0.6	0.6
Pharmacy	4	1.5	1.0	1	0.5	0.5
CMI	1	1.9	1.8	1	0.4	0.4
Public mobile clinic	1	0.6	0.6	0	0.0	0
Other public health facility	1	0.4	0.4	0	0.0	0
Private mobile clinic	1	0.4	0.4	0	0.0	0
Other private health facility	0	0.0	0	0	0.0	0
Community health worker	0	0.0	0	0	0.0	0
Traditional healer	1	0.4	0.4	0	0.0	0
Other	2	5.0	4.6	0	0.0	0
Don't know	0	0	0	1	0	0
Decline to respond	0	0	0	0	0	0

* Women who attended care at a CESAMO or CESAR were not asked about hospitalization.

3.6.4 *Insurance coverage*

Less than 1% of women reported being covered by any type of health insurance in the second follow-up (Table 3.11).

Table 3.11: Insurance coverage

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
No insurance	1831	99.3	0.4	2103	99.4	0.2
IHSS	10	0.6	0.4	9	0.3	0.1
Private insurance	2	0.0	0	7	0.2	0.1
Armed forces	0	0.0	0	0	0.0	0
Other	1	0.1	0.1	3	0.1	0.0
Don't know	3	0	0	2	0	0
Decline to respond	0	0	0	0	0	0

3.6.5 *Other barriers to health care access*

There are many other barriers to accessing health care. Women who reported that they sometimes or never sought care when they felt sick were asked what reasons prevented them from receiving health care when it was needed. Interviewers were instructed to ask in an open-ended manner for all applicable reasons, and to mark the appropriate response options in the questionnaire based on the woman's response. Table 3.12 summarizes the responses to this section. The most commonly cited factors influencing health care access in the second follow-up were the preference for treatment at home (27.9%) and the belief that the health center does not have sufficient medicines (26.6%). Seventeen percent of women did not believe they were ill enough to seek treatment. Access and quality of care were also important barriers: 15.6% of women said the health center was too far away, 7.2% said care was too expensive, and 5.2% said the health center personnel were too difficult to deal with.

Table 3.12: Other barriers to health care utilization, women 15-49 years of age who were sick in the last two weeks but did not seek care

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Treated self at home	144	266	53.3	6.0	62	209	27.9	5.1
Health center does not have sufficient medicines	23	266	9.2	2.7	45	209	26.6	5.2
Not sick enough to seek treatment	53	266	20.2	4.0	25	209	16.9	4.9
Health center is too far away	26	266	9.5	2.8	34	209	15.6	3.6
Too busy with work, children, or other commitments	15	266	4.3	1.6	38	209	14.5	3.5
Care is too expensive	18	266	10.1	4.1	8	209	7.2	3.5
It is difficult to deal with health center personnel	0	266	0.0	0	12	209	5.2	2.0
Health center is not well-equipped	1	266	0.2	0.2	4	209	4.4	2.8
Tried, but was refused care	0	266	0.0	0	5	209	4.0	2.8
Did not want to go alone	6	266	1.0	0.4	7	209	2.2	0.9
Could not afford transportation	4	266	2.6	2.1	5	209	2.1	1.1
Health center infrastructure is poor	0	266	0.0	0	4	209	1.7	1.2
Health center personnel not knowledgeable	0	266	0.0	0	3	209	1.3	0.9
Could not find transportation	4	266	2.0	1.5	3	209	1.1	0.7
Was previously mistreated	1	266	1.8	1.7	4	209	0.9	0.5
Do not trust the personnel	6	266	1.9	1.1	3	209	0.6	0.4
Tried, but no staff was at the center	10	266	2.1	0.8	1	209	0.3	0.3
Did not know where to go	2	266	0.7	0.5	0	209	0.0	0
Could not get permission to go to the doctor	2	266	0.4	0.3	0	209	0.0	0
Religious or cultural beliefs	0	266	0.0	0	0	209	0.0	0
Other	10	266	5.1	2.2	44	209	20.9	5.0

*categories not mutually exclusive (select all that apply)

4 CHAPTER 4: EXPOSURE TO HEALTH SYSTEM INTERVENTIONS

This chapter summarizes the exposure of women to four health system interventions: community health worker interventions, breastfeeding interventions, child nutrition interventions, and child health interventions.

4.1 Exposure to Community Health Workers

Respondents were asked about their exposure to community health workers. Nine percent of women reported meeting with a community health worker in the month preceding the second follow-up interview (Table 4.1). Eight percent met only once, and 1.3% met two or more times.

Table 4.1: Exposure to community health workers, women 15-49 years

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Did not meet	1689	94.5	1.0	1911	90.7	1.2
One time	112	4.4	0.8	160	8.1	1.1
Two times	15	0.9	0.4	27	0.9	0.2
Three times	4	0.1	0.1	7	0.3	0.2
Four or more times	3	0.1	0.0	2	0.1	0.0
Don't know	21	0	0	17	0	0
Decline to respond	1	0	0	0	0	0

Referral and advice services provided by community health workers are summarized in Table 4.2. Among women who met with a community health worker in the last month during the second follow-up, family planning methods or counseling was the most common service provided (40%). Advice about child nutrition counseling (37.9%) and vaccination for children (33.8%) was also frequently reported.

Table 4.2: Services provided by community health workers, women 15-49 years

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Family planning methods or counseling	49	138	34.7	6.4	88	201	40.0	6.7
Child nutrition counseling	54	138	30.5	5.4	85	202	37.9	4.9
Vaccination for children	63	138	37.8	5.7	98	202	33.8	5.1
Information, education, and communication sessions (IEC)	11	138	10.5	4.8	40	201	17.9	4.6
Referral for antenatal care	17	138	11.8	3.4	42	201	16.1	3.6
Referral for postnatal care	10	136	6.0	2.3	45	201	16.1	3.3
Referral for voluntary HIV/syphilis counseling and testing*	12	138	14.3	5.9	37	201	11.7	2.9
Referral for in-facility delivery	13	137	7.2	2.0	28	201	9.2	2.6

* For the prevention of HIV/syphilis transmission from mother to child

	Second Follow-Up 2017			
	n	N	%	SE
Micronutrients	73	201	27.6	5.0
Deworming	64	202	23.8	5.0
Diarrhea treatment with ORS and zinc	53	201	19.9	4.5
Other	30	200	20.5	5.5

Questions about these topics were not asked at baseline. They were added to the second follow-up survey to track exposure to SMI interventions.

4.2 Satisfaction with Community Health Workers

Women who met with a community health worker in the month preceding the interview were asked to assess their satisfaction with the following: number of visits, information provided by community health workers, and respectfulness of community health workers. Results are displayed in Table 4.3.

Table 4.3: Satisfaction with community health workers, women 15-49 years of age who met with community health workers in the last month

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Satisfaction with number visits from community health workers						
Very dissatisfied	30	23.5	5.5	17	9.9	4.4
Dissatisfied	7	3.6	1.3	8	7.3	3.9
Satisfied	94	67.3	5.3	157	75.4	5.8
Very satisfied	12	5.7	1.9	21	7.4	2.2
Don't know	4	0	0	1	0	0
Decline to respond	0	0	0	0	0	0
Satisfaction of knowledge and training of community health workers						
Very dissatisfied	27	22.2	5.7	18	12.1	5.2
Dissatisfied	12	6.3	1.7	6	2.1	0.9
Satisfied	89	65.2	5.5	154	77.2	5.9
Very satisfied	13	6.3	1.8	25	8.6	2.3
Don't know	6	0	0	1	0	0
Decline to respond	0	0	0	0	0	0
Satisfaction with information provided by community health workers						
Very dissatisfied	29	23.3	5.6	19	14.1	5.5
Dissatisfied	7	3.4	1.3	4	1.4	0.7
Satisfied	90	65.2	5.5	156	75.9	6.1
Very satisfied	15	8.0	2.4	24	8.6	2.4
Don't know	6	0	0	1	0	0
Decline to respond	0	0	0	0	0	0
Satisfaction with respectfulness shown by community health workers						
Very dissatisfied	28	22.7	5.7	18	12.1	5.2
Dissatisfied	7	3.5	1.5	3	1.1	0.7
Satisfied	93	67.7	5.1	159	79.1	6.0
Very satisfied	13	6.1	1.9	22	7.7	2.2
Don't know	5	0	0	2	0	0
Decline to respond	1	0	0	0	0	0

4.3 Counseling provided in health facilities

Respondents who had visited a health facility in the last 12 months (1,226 women at the second follow-up) were asked whether they were given counseling about certain topics by health center personnel. Approximately 11.7% of women in the second follow-up reported receiving guidance or advice about breastfeeding in the 12 months preceding the interview (Table 4.4). Approximately 16.7% of women in the second follow-up reported receiving guidance or advice about child nutrition in the 12 months preceding the interview (Table 4.4). Approximately 17.4% of women in the second follow-up reported receiving guidance or advice about danger signs for children's health in the 12 months preceding the interview (Table 4.4).

Table 4.4: Exposure to breastfeeding, child nutrition, and child health interventions, women 15-49 years

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
On breastfeeding	330	1040	25.0	2.2	161	1218	11.7	2.9
On child nutrition	360	1039	27.6	2.5	225	1218	16.7	3.2
On danger signs for children's health	382	1041	29.6	2.5	203	1216	17.4	3.6

4.4 Counseling provided in health facilities to women with children

In the follow-up survey, respondents who had visited a health facility in the last 12 months and who had children (1,071 women at the second follow-up) were asked whether they were given counseling about certain topics by health center personnel.

Table 4.5: Counseling provided in health facilities to women with children

	Second Follow-Up 2017			
	n	N	%	SE
Deworming	246	1066	22.1	3.5
Micronutrients	233	1065	20.2	3.4
Diarrhea treatment with ORS and zinc	162	1062	14.3	2.4

Questions about these topics were not asked at baseline. They were added to the second follow-up survey to track exposure to SMI interventions.

5 CHAPTER 5: FAMILY PLANNING

This chapter summarizes key indicators related to the knowledge of, access to, need for, and use of family planning methods among women of reproductive age (15-49 years) participating in the SMI-Honduras second follow-up household survey.

Family planning questions were asked only to women of reproductive age who were married or partnered. During the SMI-Honduras baseline household survey, family planning questions were asked to women whose marital status was reported as "married" or "partnered" by the SMI-Honduras household census respondent. During the second follow-up, the family planning section was instead conditioned on a question about marital status asked to the respondent herself at the start of the woman's health interview. This captured participants who had a change in marital status between the census and household survey and participants whose marital status was incorrectly recorded in the census. At the baseline, 1,205 women qualified for the family planning questions, and at the second follow-up, 1,422 women qualified.

5.1 Knowledge of the Fertile Period

The successful use of family planning methods depends on an understanding of when during the menstrual cycle a woman is most likely to conceive. This is especially true for traditional methods such as the rhythm method (i.e., periodic abstinence) and the withdrawal method. To assess knowledge of the fertile period, women were asked if there are certain days when a woman is more likely to become pregnant, and when during the menstrual cycle those days occur. Responses to these questions are summarized in Table 5.1. In the second follow-up, 62.2% of women indicated that there were certain days when a woman is more likely to become pregnant, and of these women, only 9.8% identified the correct timing of the fertile period (halfway between two periods).

Table 5.1: Knowledge of the fertile period, women 15-49 years of age who are married or partnered

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Knowledge of the fertile period	694	1068	64.1	3	773	1243	62.2	2.8

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Knowledge of timing of fertile period, among women who know of fertile period						
Just before period	54	8.8	1.9	94	12.9	1.9
During period	20	3.6	1.3	13	2.6	1.1
Just after period	504	78.8	2.6	524	73.7	2.7
Halfway between periods	62	8.7	1.7	56	9.8	2.0
Other	1	0.1	0.1	2	1.0	0.9
Don't know	53	0	0	84	0	0
Decline to respond	0	0	0	0	0	0

5.2 Use of Family Planning Methods

5.2.1 *Current use*

The coverage of contraceptive methods is one of the indicators most frequently used to assess the success of family planning program activities. It is also widely used as a determinant of fertility. Women who said they had heard of a family planning method were asked if they were currently using that method. Table 5.2 displays the percentage of all women using at least one family planning method, as well as the percentage of women reporting use of more than one family planning method at the time of the interview. Sixty five percent of all survey respondents in the second follow-up reported current use of at least one family planning method.

Women considered "in need" of family planning methods are those who are married or partnered, excluding those who report the following characteristics: does not have sexual relations, virgin,

menopausal, infertile, hysterectomy, pregnant, or wants to become pregnant. Even women not considered "in need" of contraception may use a method. Table 5.3 shows the uptake of modern family planning methods among all married and partnered women (65%), and among women considered "in need" of contraception (77.4%).

Table 5.2: Current use of family planning methods, women 15-49 years of age who are married or partnered

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Currently in need of contraception	969	1203	71.4	2.2	1198	1422	81.2	1.7
Current use of any method, among all women	770	1203	56.6	2.9	964	1422	65.0	2.6

Table 5.3: Current use of modern family planning methods, women 15-49 years of age who are married or partnered and in need of contraception

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Current use of any method	751	969	76.6	3.0	932	1198	77.4	2.5
Current use of modern method	685	969	69.3	3.2	902	1198	75.4	2.6

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Number of methods the respondent is currently using						
Not using any family planning methods	225	23.9	3.0	266	22.6	2.5
Using 1 family planning method	733	75.1	2.9	931	77.4	2.5
Using 2 family planning methods	11	1.0	0.4	1	0.0	0
Not using any family planning methods	0	0.0	0	0	0.0	0
Using 1 family planning method	0	0.0	0	0	0.0	0
Using 2 family planning methods	0	0.0	0	0	0.0	0

Table 5.4 displays the percentage of all women using specific family planning methods. The methods most commonly in use during the second follow-up are injectables (23.1%) and female sterilization (18.4%).

Table 5.4: Current use of family planning methods, by type of method, for women 15-49 years of age who are married or partnered

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Injectable	366	1198	22.5	1.6	404	1421	23.1	1.8
Female sterilization	110	1198	10.7	1.7	207	1422	18.4	2.1
Oral contraceptive	128	1198	11.5	1.8	132	1420	10.0	1.4
Intrauterine device (IUD)	66	1198	4.2	0.8	114	1422	7.6	1.3
Implant	2	1197	0.1	0.1	53	1422	2.6	0.7
Rhythm	38	1198	3.2	0.9	19	1422	1.6	0.5
Male condom	30	1198	2.6	0.8	20	1421	1.1	0.4
Withdrawal	27	1198	2.2	0.6	11	1422	0.5	0.2
Lactational amenorrhea	7	1198	0.4	0.2	2	1422	0.1	0.1
Male sterilization	0	1198	0.0	0	0	1421	0.0	0
Female condom	0	1198	0.0	0	0	1421	0.0	0
Diaphragm	0	1198	0.0	0	0	1422	0.0	0
Sponge	0	1198	0.0	0	0	1420	0.0	0
Emergency contraception (Plan B)	0	1198	0.0	0	0	1422	0.0	0
Other modern method	0	1198	0.0	0	0	1420	0.0	0
Other traditional method	0	1198	0.0	0	1	1419	0.0	0

* categories not mutually exclusive (select all that apply)

5.3 Sources of Family Planning Methods

Information on where women obtain contraceptive methods is important for family planning program managers. The places where the currently-used family planning methods were acquired are summarized in Table 5.5.

The public sector is the source most commonly reported by users of most modern family planning methods, including female sterilization. Pharmacies are important sources for injectables, the pill, and male condoms. Women report learning about traditional methods in the public sector, from friends or relatives, or at church (Table 5.6).

Table 5.5: Source of modern family planning methods, women 15-49 years of age who are married or partnered

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Injectable						
CESAMO	120	31.7	5.4	261	59.0	5.0
CESAR	197	55.2	6.1	88	23.5	4.2
Pharmacy	24	6.4	1.5	25	8.5	2.3
Community health worker	3	0.8	0.4	24	7.8	2.6
Public hospital	5	1.2	0.6	2	0.4	0.3

(continued)

	n	%	SE	n	%	SE
Other public health facility	0	0.0	0	1	0.2	0.2
CMI	5	1.3	0.7	1	0.2	0.2
Private mobile clinic	0	0.0	0	1	0.1	0.1
Public mobile clinic	1	0.3	0.3	0	0.0	0
Private hospital	0	0.0	0	0	0.0	0
Private health clinic	7	2.0	1.1	0	0.0	0
Private doctor's office	3	0.6	0.4	0	0.0	0
Other private health facility	1	0.2	0.2	0	0.0	0
Traditional healer	0	0.0	0	0	0.0	0
Store	0	0.0	0	0	0.0	0
Market	0	0.0	0	0	0.0	0
Church	0	0.0	0	0	0.0	0
Friend/relative	1	0.2	0.2	0	0.0	0
Type 3 Polyclinic	0	0.0	0	0	0.0	0
Other	0	0.0	0	1	0.1	0.1
Don't know	1	0	0	0	0	0
Decline to respond	0	0	0	0	0	0
Female sterilization						
Public hospital	79	63.5	7.2	167	81.1	4.3
Private hospital	1	0.3	0.3	11	5.1	2.7
CMI	0	0.0	0	4	2.5	1.8
Other private health facility	0	0.0	0	4	2.1	1.4
Private health clinic	10	12.1	6.0	5	2.0	1.1
Other public health facility	2	5.1	4.4	3	0.7	0.4
Private doctor's office	1	5.7	5.6	3	0.6	0.4
Public mobile clinic	1	1.3	1.3	3	0.5	0.3
Private mobile clinic	2	1.0	0.7	1	0.2	0.2
CESAMO	6	5.0	3.1	1	0.2	0.2
Pharmacy	0	0.0	0	0	0.0	0
Community health worker	0	0.0	0	0	0.0	0
Traditional healer	0	0.0	0	0	0.0	0
Store	0	0.0	0	0	0.0	0
Market	0	0.0	0	0	0.0	0
Church	0	0.0	0	0	0.0	0
Friend/relative	0	0.0	0	0	0.0	0
CESAR	1	0.7	0.7	0	0.0	0
Type 3 Polyclinic	0	0.0	0	0	0.0	0
Other	7	5.4	3.3	5	5.1	2.4
Don't know	0	0	0	0	0	0
Decline to respond	0	0	0	0	0	0
Oral contraceptive						
CESAMO	35	21.6	4.7	73	48.1	8.2
Pharmacy	28	19.5	6.3	25	26.7	7.4
CESAR	59	51.4	8.7	30	23.2	8.2
Community health worker	1	0.4	0.4	2	1.2	0.9
Private health clinic	1	5.3	5.2	1	0.3	0.3
Public hospital	1	0.3	0.3	0	0.0	0
Public mobile clinic	0	0.0	0	0	0.0	0
Other public health facility	0	0.0	0	0	0.0	0
Private hospital	0	0.0	0	0	0.0	0

(continued)

	n	%	SE	n	%	SE
Private doctor's office	0	0.0	0	0	0.0	0
Private mobile clinic	0	0.0	0	0	0.0	0
Other private health facility	0	0.0	0	0	0.0	0
Traditional healer	0	0.0	0	0	0.0	0
Store	1	0.4	0.4	0	0.0	0
Market	0	0.0	0	0	0.0	0
Church	0	0.0	0	0	0.0	0
Friend/relative	0	0.0	0	0	0.0	0
CMI	2	1.0	0.7	0	0.0	0
Type 3 Polyclinic	0	0.0	0	0	0.0	0
Other	0	0.0	0	1	0.4	0.4
Don't know	0	0	0	0	0	0
Decline to respond	0	0	0	0	0	0
Intrauterine device (IUD)						
CESAMO	21	31.4	7.0	64	54.3	9.3
Private doctor's office	2	2.6	1.9	3	9.8	8.2
CESAR	23	31.8	7.2	13	9.7	4.1
Public hospital	7	8.7	3.3	17	9.1	2.6
CMI	3	7.4	4.3	8	7.0	2.8
Private hospital	1	1.2	1.2	1	4.4	4.2
Private health clinic	8	7.8	3.0	4	2.1	1.8
Other public health facility	0	0.0	0	1	0.8	0.8
Community health worker	0	0.0	0	1	0.7	0.8
Public mobile clinic	0	0.0	0	0	0.0	0
Private mobile clinic	0	0.0	0	0	0.0	0
Other private health facility	0	0.0	0	0	0.0	0
Pharmacy	0	0.0	0	0	0.0	0
Traditional healer	0	0.0	0	0	0.0	0
Store	0	0.0	0	0	0.0	0
Market	0	0.0	0	0	0.0	0
Church	0	0.0	0	0	0.0	0
Friend/relative	0	0.0	0	0	0.0	0
Type 3 Polyclinic	0	0.0	0	0	0.0	0
Other	2	9.1	6.5	2	2.1	1.4
Don't know	1	0	0	0	0	0
Decline to respond	0	0	0	0	0	0
Implant						
CESAMO	0	0.0	0	38	71.8	10.4
CESAR	1	40.5	34.4	8	12.3	4.4
Church	0	0.0	0	2	4.2	3.8
Other public health facility	0	0.0	0	1	3.4	3.3
Community health worker	0	0.0	0	2	3.4	2.2
Pharmacy	0	0.0	0	1	1.1	1.1
Private health clinic	0	0.0	0	1	0.8	0.8
Public hospital	1	59.5	34.4	0	0.0	0
Public mobile clinic	0	0.0	0	0	0.0	0
Private hospital	0	0.0	0	0	0.0	0
Private doctor's office	0	0.0	0	0	0.0	0
Private mobile clinic	0	0.0	0	0	0.0	0
Other private health facility	0	0.0	0	0	0.0	0

(continued)

	n	%	SE	n	%	SE
Traditional healer	0	0.0	0	0	0.0	0
Store	0	0.0	0	0	0.0	0
Market	0	0.0	0	0	0.0	0
Friend/relative	0	0.0	0	0	0.0	0
CMI	0	0.0	0	0	0.0	0
Type 3 Polyclinic	0	0.0	0	0	0.0	0
Other	0	0.0	0	1	3.1	2.8
Don't know	0	0	0	2	0	0
Decline to respond	0	0	0	0	0	0
Male condom						
CESAMO	10	25.5	8.1	10	41.1	15.9
Pharmacy	8	23.1	10.3	5	40.2	17.7
CESAR	10	46.3	14.1	4	13.9	7.2
CMI	1	2.7	2.7	1	4.8	4.9
Public hospital	0	0.0	0	0	0.0	0
Public mobile clinic	0	0.0	0	0	0.0	0
Other public health facility	0	0.0	0	0	0.0	0
Private hospital	0	0.0	0	0	0.0	0
Private health clinic	0	0.0	0	0	0.0	0
Private doctor's office	0	0.0	0	0	0.0	0
Private mobile clinic	0	0.0	0	0	0.0	0
Other private health facility	0	0.0	0	0	0.0	0
Community health worker	0	0.0	0	0	0.0	0
Traditional healer	0	0.0	0	0	0.0	0
Store	0	0.0	0	0	0.0	0
Market	0	0.0	0	0	0.0	0
Church	0	0.0	0	0	0.0	0
Friend/relative	0	0.0	0	0	0.0	0
Type 3 Polyclinic	0	0.0	0	0	0.0	0
Other	1	2.4	2.4	0	0.0	0
Don't know	0	0	0	0	0	0
Decline to respond	0	0	0	0	0	0

*Female condom and sponge omitted from table because no women reported receiving them in baseline or follow-up.

Table 5.6: Source of knowledge about traditional family planning methods, women 15-49 years of age who are married or partnered

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Lactational amenorrhea						
Public hospital	0	0.0	0	1	100.0	0.0
Public mobile clinic	0	0.0	0	0	0.0	0
Other public health facility	0	0.0	0	0	0.0	0
Private hospital	0	0.0	0	0	0.0	0
Private health clinic	0	0.0	0	0	0.0	0
Private doctor's office	0	0.0	0	0	0.0	0
Private mobile clinic	0	0.0	0	0	0.0	0

Other private health facility	0	0.0	0	0	0.0	0
Pharmacy	0	0.0	0	0	0.0	0
Community health worker	0	0.0	0	0	0.0	0
Traditional healer	1	16.7	15.5	0	0.0	0
Store	0	0.0	0	0	0.0	0
Market	0	0.0	0	0	0.0	0
Church	1	11.0	9.5	0	0.0	0
Friend/relative	4	52.9	18.0	0	0.0	0
CESAR	1	19.4	17.4	0	0.0	0
CESAMO	0	0.0	0	0	0.0	0
CMI	0	0.0	0	0	0.0	0
Type 3 Polyclinic	0	0.0	0	0	0.0	0
Other	0	0.0	0	0	0.0	0
Don’t know	0	0	0	1	0	0
Decline to respond	0	0	0	0	0	0
Rhythm						
Church	5	16.0	9.7	2	25.8	19.4
Friend/relative	17	31.9	8.7	6	25.1	12.4
CESAMO	4	6.8	3.6	3	12.4	7.8
CESAR	8	32.1	12.7	2	6.9	5.3
Public hospital	0	0.0	0	0	0.0	0
Public mobile clinic	0	0.0	0	0	0.0	0
Other public health facility	0	0.0	0	0	0.0	0
Private hospital	0	0.0	0	0	0.0	0
Private health clinic	0	0.0	0	0	0.0	0
Private doctor’s office	0	0.0	0	0	0.0	0
Private mobile clinic	0	0.0	0	0	0.0	0
Other private health facility	0	0.0	0	0	0.0	0
Pharmacy	0	0.0	0	0	0.0	0
Community health worker	0	0.0	0	0	0.0	0
Traditional healer	1	3.1	2.6	0	0.0	0
Store	0	0.0	0	0	0.0	0
Market	0	0.0	0	0	0.0	0
CMI	0	0.0	0	0	0.0	0
Type 3 Polyclinic	0	0.0	0	0	0.0	0
Other	2	10.2	6.8	2	29.7	18.6
Don’t know	1	0	0	4	0	0
Decline to respond	0	0	0	0	0	0
Withdrawal						
Friend/relative	5	13.8	5.5	5	63.9	16.3
CESAMO	1	3.2	3.3	1	9.8	8.7
Private doctor’s office	0	0.0	0	1	4.8	5.1
Public hospital	0	0.0	0	0	0.0	0
Public mobile clinic	0	0.0	0	0	0.0	0
Other public health facility	1	3.0	3.0	0	0.0	0
Private hospital	0	0.0	0	0	0.0	0
Private health clinic	0	0.0	0	0	0.0	0
Private mobile clinic	0	0.0	0	0	0.0	0
Other private health facility	0	0.0	0	0	0.0	0
Pharmacy	0	0.0	0	0	0.0	0
Community health worker	0	0.0	0	0	0.0	0
Traditional healer	1	3.2	3.3	0	0.0	0
Store	0	0.0	0	0	0.0	0

Market	0	0.0	0	0	0.0	0
Church	3	8.3	5.1	0	0.0	0
CESAR	7	40.9	14.7	0	0.0	0
CMI	0	0.0	0	0	0.0	0
Type 3 Polyclinic	0	0.0	0	0	0.0	0
Other	6	27.5	11.0	2	21.5	15.0
Don't know	3	0	0	0	0	0
Decline to respond	0	0	0	2	0	0

5.4 Non-Use and Interruption of Use of Family Planning Methods

Non-use and interruption of use of family planning methods are major concerns for family planning program managers.

5.4.1 *Prevalence of interruption*

The prevalence of interruption and non-use of family planning methods is summarized in Table 5.7. Of women participating in the second follow-up survey, 81.2% are considered "in need" of contraception (i.e., they did not report any of the following: does not have sexual relations, virgin, menopausal, infertile, hysterectomy, pregnant, or wants to become pregnant). Among these women in need, 1.8% reported any interruption in the use of family planning methods in the previous year.

Table 5.7: Interruption and non-use of family planning methods, among women 15-49 years of age who are married or partnered and in need of contraception

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Discontinuation rate*	19	969	1.6	0.5	29	1198	1.8	0.6

* any interruption in use during the last year, among women in need of contraception

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Number of interruptions in use during the last year						
none	950	98.4	0.5	1169	98.2	0.6
once	19	1.6	0.5	17	1.0	0.4
2-6 times per year	0	0.0	0	12	0.7	0.3
7-12 times per year	0	0.0	0	0	0.0	0
>12 times per year	0	0.0	0	0	0.0	0

5.4.2 *Reasons for non-use*

Women who interrupted use of family planning methods in the year preceding the interview, and those who indicated they were not using any method on the day of the interview, were asked to specify all

reasons why they did not use a method. The interviewer matched responses provided by the respondent to a list of reasons in the questionnaire (Table 5.8). The most commonly cited reasons for non-use at the time of the second follow-up interview were, do not like to use contraception (20.7%), respondent is not sexually active (14.6%), and respondent is trying to become pregnant (9.9%).

Table 5.8: Reasons for non-use of family planning methods, women 15-49 years of age who are married or partnered and who are not using family planning methods

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Do not like to use contraception	94	402	20.6	3.7	99	446	20.7	2.8
Not sexually active	64	402	12.7	2.0	65	446	14.6	3.0
Trying to become pregnant	50	402	17.7	3.2	36	446	9.9	2.4
Currently pregnant	27	402	6.3	1.6	42	446	9.8	2.4
Spouse or partner opposed to use	18	402	2.7	0.8	42	446	9.3	2.3
Married	33	402	4.8	1.4	28	446	8.6	2.9
Opposed to use	23	402	5.3	1.6	27	446	7.1	1.7
Using contraception interferes with normal body processes	10	402	1.7	0.5	32	446	5.7	1.7
Infrequently sexually active	32	402	7.9	2.6	26	446	5.0	1.6
Using contraception is uncomfortable	3	402	0.4	0.2	19	446	4.2	1.4
Breastfeeding	23	402	3.1	0.9	25	446	3.9	1.2
Concerned about side effects	15	402	3.4	1.1	24	446	3.8	1.1
No menstrual period since giving birth	6	402	1.1	0.4	15	446	3.0	1.1
Menopausal	24	402	8.1	2.5	10	446	2.7	1.0
Against religious beliefs	1	402	0.5	0.5	9	446	2.3	1.1
Unmarried	25	402	4.6	1.0	6	446	1.4	0.8
Knows no method	5	402	0.9	0.5	3	446	1.1	1.0
The health facility is too far away	1	402	0.1	0.1	3	446	0.8	0.6
Have undergone hysterectomy	7	402	0.8	0.3	2	446	0.4	0.3
Infertile	21	402	14.1	4.3	3	446	0.4	0.2
Others opposed to use	2	402	0.2	0.1	2	446	0.3	0.2
Knows no source for methods	3	402	1.2	1.0	2	446	0.3	0.2
Could not afford transportation	0	402	0.0	0	2	446	0.3	0.2
Mistrust health center staff	4	402	0.8	0.4	2	446	0.3	0.3
No method was available	0	402	0.0	0	1	446	0.2	0.2
Virgin	1	402	0.1	0.1	0	446	0.0	0
Could not find transportation to a health facility	0	402	0.0	0	0	446	0.0	0
The method is too expensive	2	402	0.3	0.2	0	446	0.0	0
Preferred method was not available	1	402	0.1	0.1	0	446	0.0	0
Health facility staff difficult to deal with	0	402	0.0	0	0	446	0.0	0
Other	28	402	7.4	2.4	28	446	5.7	1.4

* "Using contraception affects health" was an option offered in the second follow-up, but was not available at baseline. 48 women selected this as a reason for not using family planning at the second follow-up.

* categories not mutually exclusive (select all that apply)

5.5 Family Planning Intentions and Decision-Making

5.5.1 *Participation in family planning decision*

In this setting in the second follow-up, 78.3% of women report that decisions about family planning methods are jointly made by the respondent and her partner. In only 3.6% of cases, the decision to use family planning methods is up to the respondent's partner alone.

Table 5.9: Participation in family planning decision-making, women 15-49 years of age who are married or partnered and are currently using family planning methods

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Joint decision	729	79.8	2.5	903	78.3	2.4
Mostly the respondent	113	11.2	1.5	207	17.2	2.3
Mostly respondent's spouse/partner	67	7.1	1.5	31	3.6	1.4
Others	7	1.6	0.9	7	0.6	0.3
Not applicable - not partnered	2	0.2	0.2	2	0.4	0.3
Don't know	6	0	0	7	0	0
Decline to respond	2	0	0	5	0	0

5.5.2 *Informed choice*

With respect to use of family planning methods, "informed choice" refers to whether or not health care workers described other options for family planning methods, possible side effects associated with the method of choice, and how to respond to side effects if they occur. This information can be used to help women select an appropriate contraceptive method, and to assist users in coping with side effects (thus decreasing discontinuation rates for non-permanent methods).

Table 5.10 shows the percent of women currently using family planning methods who were told about other options for contraception (57% of women in the second follow-up).

Table 5.10: Family planning decision-making, informed choice, women 15-49 years of age who are married or partnered and who are currently using family planning methods

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Informed about other family planning options by a doctor, nurse, or community health worker	480	920	48.8	2.6	648	1161	57	3.8

5.6 Exposure to Family Planning Information

5.6.1 *Family planning messages delivered by health care providers*

Respondents were asked about their exposure to family planning messages delivered by health care providers (Table 5.11). Fifty six percent of women in the second follow-up reported being advised about family planning at the health care facility they attend during the past 12 months. Nineteen percent of all respondents indicated that they had been visited by a health promoter who provided information about family planning in the last 12 months. Just 8.9% of respondents who had not attended a health facility in the last 12 months were visited by a health promoter who provided information about family planning.

Table 5.11: Family planning messages delivered by health care providers in the last 12 months, women 15-49 years of age who are married or partnered

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Discussion about family planning methods with staff member at a health facility	400	658	53.8	2.9	439	795	55.7	3.7
Discussion about family planning methods during health promoter visit	191	1198	13.8	1.5	275	1410	18.8	2.2
Visit by promotor, among women who had not visited a health facility	24	537	5.9	1.7	55	614	8.9	1.7

5.7 Age at First Birth

5.7.1 *Age at first birth*

Seventy two percent of respondents in the second follow-up had ever given birth (Table 5.12). Of these women, the median age of the women when their first child was born was 19 years old. Only a quarter of women were 21 years old or older when their first child was born. Seven percent of women reported a history of stillbirth, miscarriage, and/or abortion.

Table 5.12: Parity and age at first birth, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Ever given birth	1477	1847	69.4	2.3	1716	2124	71.7	1.9
Ever had a stillbirth, miscarriage, or abortion	170	1840	8.8	1.1	173	2121	7.3	0.8

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Age at first birth, among parous women	1464	11	10	17	19	21	37
Second follow-up 2017							
Age at first birth, among parous women	1714	0	10	17	19	21	43

6 CHAPTER 6: MATERNAL HEALTH CARE

This chapter summarizes key indicators pertaining to antenatal care, delivery care, and postpartum care for the most recent live birth in the last two years as reported by women of reproductive age (15-49 years) participating in the SMI-Honduras second follow-up household survey. Participating women were interviewed about all live births in the last five years, but to reduce the impact of recall bias, results reported here are for each woman's most recent birth in the last two years. At the baseline, 666 women were interviewed about at least one birth in the last two years. At the second follow-up, 710 women were interviewed about births in the last two years.

6.1 Antenatal Care

To reduce recall bias, data pertaining to antenatal care are summarized for a woman's most recent birth in the last two years.

6.1.1 *Antenatal care coverage*

Early and regular checkups by trained medical providers are important in assessing the physical status of women during pregnancy and provide an opportunity to intervene in a timely manner if any problems are detected. The Maternal and Child Health Questionnaire captured information from women on both overall coverage of antenatal care and the content of care received. To obtain information on source of antenatal care, interviewers recorded all persons a woman consulted for care. Timing of antenatal care was assessed by asking women how many weeks or months pregnant they were when they attended their first antenatal care visit. The same details were recorded for up to eight antenatal care visits.

The percentage of women with a birth in the last two years who attended at least one antenatal care visit for the most recent birth, and the percent distribution of timing of care among those who received any antenatal care are presented in Table 6.1. Definition of "most recent birth" changed between baseline and second follow-up. The type of facility where antenatal care was sought is detailed in Table 6.2.

Among women with a child under the age of 2 in the second follow-up, 97.9% attended at least one antenatal care visit and 92.9% of women had at least one antenatal care visit with a doctor or professional nurse. At the second follow-up, 56.1% of women had an antenatal care visit during the first trimester (first 12 weeks) with a doctor or professional nurse, compared to 35.3% at the baseline. The median age of gestation at the first antenatal care visit during the second follow-up was 2 months.

Table 6.1: Antenatal care coverage for the most recent birth in the last two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Attended at least one antenatal care visit	635	666	95.0	1.2	695	710	97.9	0.6
Attended at least one antenatal care visit with doctor or professional nurse	543	666	80.9	2.8	664	710	92.9	2.0
Antenatal care visit with doctor or professional nurse in the first trimester (12 weeks)	251	661	35.3	2.5	406	691	56.1	2.3

* Definition of most recent birth changed between baseline and second follow-up

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Month of gestation of first ANC visit	630	5	0.2	1	3	4	9
Second follow-up 2017							
Month of gestation of first ANC visit	676	17	0.2	1	2	3	9

Regarding the type of facility where antenatal care was usually sought during the second follow-up (Table 6.2), most women who attended antenatal care for their most recent delivery in the last two years sought care in a CESAMO (71.1%) or CESAR (23.8%). Only 1.6% of women sought antenatal care in a private doctor's office.

Table 6.2: Usual antenatal care location, women 15-49 years of age who attended at least one antenatal care visit for most recent birth in the last two years

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
CESAMO	269	42.2	5.5	491	71.1	3.9
CESAR	289	45.6	5.6	162	23.8	3.9
Private doctor's office	6	0.8	0.4	14	1.6	0.5
Private health clinic	24	3.0	0.8	6	0.8	0.3
Other public health facility	1	0.1	0.1	6	0.7	0.3
Public hospital	13	2.1	0.8	4	0.6	0.3
CMI	15	2.2	0.7	4	0.6	0.3
Community health worker	0	0.0	0	2	0.3	0.3
Private hospital	5	2.1	1.7	2	0.2	0.2
Private mobile clinic	2	0.2	0.2	1	0.1	0.1
Public mobile clinic	0	0.0	0	0	0.0	0
Other private health facility	0	0.0	0	0	0.0	0
Pharmacy	0	0.0	0	0	0.0	0
Traditional healer	0	0.0	0	0	0.0	0
Other	9	1.5	0.5	2	0.3	0.2
Don't know	0	0	0	1	0	0
Decline to respond	2	0	0	0	0	0

6.1.2 *Frequency of antenatal care visits*

Antenatal care can be more effective in avoiding adverse pregnancy outcomes when it is sought early in the pregnancy and continues until delivery. According to the national norm in Honduras, it is recommended that women receive a minimum of four antenatal care visits. The frequency of antenatal care visits is summarized in Table 6.3. Table 6.4 shows the percentage of women with four or more visits with skilled providers and according to best practices.

In the second follow-up, 90.7% of women reported having four or more antenatal care visits during their most recent pregnancy in the last two years. Fifty two percent of women reported having seven or more antenatal care visits during their most recent pregnancy.

The content of antenatal care is as crucial as the frequency of visits. As shown in Table 6.4, 43.1 percent of all women in the second follow-up survey had four or more antenatal care visits with a doctor or professional nurse, and with each of 10 defined best practices performed at least once during pregnancy (measurement of blood type, test for anemia, test for syphilis, test for HIV, test of blood glucose, test for proteinuria, measurement of maternal blood pressure, measurement of maternal weight, measurement of fundal height, and measurement of fetal heartbeat).

Table 6.3: Frequency of antenatal care visits for the most recent birth in the last two years, women 15-49 years of age

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
None	31	5.1	1.2	15	2.2	0.6
1-3 visits	77	12.8	2.1	47	7.2	1.2
4-6 visits	248	40.0	2.6	260	39.0	2.1
7-9 visits	298	41.7	2.9	369	51.2	2.2
10+ visits	4	0.4	0.2	5	0.5	0.2
Don't know	6	0	0	14	0	0
Decline to respond	0	0	0	0	0	0

Table 6.4: Frequency of antenatal care visits with skilled provider for the most recent birth in the last two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
At least four antenatal care visits with doctor or professional nurse	444	660	65.2	3.4	596	696	84.4	2.5
At least four antenatal care visits with doctor or professional nurse according to best practices*	138	660	19.3	2.6	322	696	43.1	3.7

*measuring blood type, anemia, syphilis, HIV, glucose, proteinuria, blood pressure, weight, fundal height, fetal heartbeat

6.1.3 *Content of antenatal care*

The content of antenatal care is an important indicator of quality of care. The coverage of key procedures was assessed among women who received any antenatal care for a birth in the last two years (Table 6.5 and Table 6.6). It is important to remember that the validity of these data hinge on the respondent's understanding of the question and her ability to recall events that may have occurred several years prior to the interview.

There was variation in performance of the 10 "best practice" procedures during the second follow-up: measured maternal weight (99.6%), measured maternal blood pressure (99.4%), tested for proteinuria (96.6%), measured fetal heartbeat (96.6%), measured fundal height (96%), tested for anemia (94.5%), measured blood type (89.5%), measured blood glucose (81%), tested for HIV (80.2%), and tested for syphilis (72.7%). Women were unfamiliar with several tests, as evidenced by the high number of missing responses for proteinuria and syphilis in particular.

Table 6.5: Content of antenatal care visits - best practices, among women 15-49 years who attended at least one antenatal care visit for most recent birth in the last two years

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Measured maternal weight	620	635	97.5	0.7	693	695	99.6	0.3
Measured maternal blood pressure	614	633	96.9	0.8	691	695	99.4	0.3
Tested for proteinuria	441	519	84.8	2.3	641	664	96.6	1.0
Measured fetal heartbeat	551	630	86.9	1.9	674	695	96.6	0.9
Measured fundal height	457	622	72.5	3.5	666	693	96.0	1.2
Tested for anemia	507	573	87.9	1.5	646	678	94.5	1.1
Measured blood type	512	581	87.8	1.9	613	680	89.5	1.6
Measured blood glucose	357	550	63.5	3.5	552	669	81.0	2.7
Tested for HIV	392	609	64.1	3.7	553	680	80.2	2.7
Tested for syphilis	299	523	57.2	3.7	468	630	72.7	3.4

Most women in the second follow-up had a collected blood specimen (99.3%) and a collected urine specimen (98%) collected during their antenatal care visits for the most recent birth during the past two years.

Table 6.6: Content of antenatal care visits - other services provided, among women 15-49 years who attended at least one antenatal care visit for most recent birth in the last two years

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Collected blood specimen	603	633	95.4	0.9	690	695	99.3	0.3
Collected urine specimen	581	634	91.0	1.5	681	694	98.0	0.6
Offered an HIV test	429	614	68.6	3.2	593	684	85.2	2.6
Performed an ultrasound	348	632	54.6	4.0	580	695	81.2	2.9
Tested for diabetes	233	348	68.6	3.5	415	551	72.7	2.6

6.1.4 *Coverage of tetanus toxoid vaccinations during pregnancy*

Tetanus toxoid injections are given during pregnancy for the prevention of neonatal tetanus. To prevent transmission of this potentially fatal infection, all women should be vaccinated with tetanus toxoid when they become pregnant. A baby is considered protected if the mother receives two doses of tetanus toxoid during pregnancy, with the second at least two weeks before delivery. However, if a woman was vaccinated previously, she only requires one dose during the current pregnancy. Five doses are considered adequate to confer lifetime immunity. To assess the coverage of tetanus toxoid vaccination, women who reported receiving any antenatal care during their most recent pregnancy were asked if they received tetanus toxoid injections.

As shown in Table 6.7, the coverage of sufficient tetanus toxoid vaccination during pregnancy was 56.2% among women who received antenatal care during the second follow-up. Thirty seven percent of women

received one vaccination during the pregnancy and 44.2% received two or more. Among women with antenatal care, 39% had never been vaccinated before and 16.7% had received a vaccine in the last 10 years. Among women who were not vaccinated during prenatal care visits, 14.2% had never been vaccinated.

Table 6.7: Coverage of tetanus toxoid vaccinations during pregnancy, among women 15-49 years who attended at least one antenatal care visit for most recent birth in the last two years

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Two or more injections during pregnancy	117	37.3	2.7	180	44.2	3.5
One injection during pregnancy, one <10 years before	44	12.1	1.8	54	12.0	1.9
One injection during pregnancy, none <10 years before	67	20.9	2.9	105	24.8	2.4
No injections during pregnancy, one or more <10 years before	25	7.5	1.5	18	4.7	1.2
No injections during pregnancy nor during the 10 years prior	74	22.3	2.6	62	14.2	2.3
Don't know	305	0	0	276	0	0
Decline to respond	3	0	0	0	0	0

6.1.5 *Exposure to safe pregnancy messages*

Women who received antenatal care were asked about a series of topics for which they might have received counseling or advice during their pregnancy. Table 6.8 shows the percentage of women in the second follow-up who were exposed to the following messages: counseled about pregnancy (96.1%); counseled about danger signs during pregnancy (91.6%); advised to deliver in a facility (91.3%); given information about in-facility delivery (90.9%); counseled about nutrition during pregnancy (87.7%); counseled about breastfeeding (86.9%); counseled about contraception after delivery (86.6%).

Exposure to safe pregnancy practices increased from baseline to second follow-up for all counseling categories. In the second follow-up, 86.5% of women were counseled about childcare compared to 71.6% at baseline. 62.9% of women in the second follow-up, compared to 43.6% at baseline, were counseled about making a transportation plan for delivery. Compared to 38.3% of women at baseline, 52.7% of women in the second follow-up were advised to have a Cesarean section.

Table 6.8: Exposure to safe pregnancy practices, women 15-49 years of age who attended at least one antenatal care visit for most recent birth in the last two years

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Counseled about pregnancy	567	634	89.2	1.9	666	694	96.1	0.8
Counseled about danger signs during pregnancy	494	628	78.7	2.8	643	693	91.6	1.5
Advised to deliver in a facility	523	632	82.7	2.4	633	692	91.3	1.2
Given information about in-facility delivery	515	631	82.0	2.2	628	692	90.9	1.4
Counseled about nutrition during pregnancy	494	629	78.8	2.3	611	694	87.7	1.7
Counseled about breastfeeding	503	631	79.5	2.7	606	695	86.9	2.1
Counseled about contraception after delivery	478	629	76.1	2.6	604	694	86.6	1.7
Counseled about childcare	450	629	71.6	3.0	605	693	86.5	1.7
Counseled about making a transportation plan for delivery	277	632	43.6	3.6	453	694	62.9	4.0
Advised to have a Cesarean section	241	631	38.3	3.5	381	694	52.7	4.5

6.2 Delivery Care

Proper medical attention and hygienic conditions during delivery can reduce the risk of complications, infections, and even death for the mother and newborn baby. Characteristics of the delivery, including place of delivery and assistance at delivery were captured for all births in the five years preceding the survey. To reduce recall bias, only data from the most recent delivery within the last two years are summarized.

6.2.1 *Place of delivery*

The location of the most recent birth and the means of transportation used to get to the facility are shown in Table 6.9. The majority of births occurred in public hospitals (65.9%) and public health center/clinics (22.7%). Yet 9.2% of women reported giving birth at home or at another person's home. Deliveries in private-sector facilities were rare (1.2%). Among women who delivered in a facility, 45.2% indicated that they used a private vehicle for transport (Table 6.10).

Table 6.9: Place of delivery for most recent birth in the last two years, women 15-49 years of age

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Public hospital	375	53.7	3.8	477	65.9	3.4
Public health center/clinic	114	17.6	2.0	157	22.7	3.0
Own home	136	21.8	3.9	56	8.9	2.0
Private hospital	8	2.4	1.6	7	0.9	0.4
Other public health facility	2	0.3	0.2	5	0.6	0.3
Other house	11	1.6	0.6	2	0.3	0.2
Other private health facility	1	0.2	0.2	1	0.2	0.2
Private health center/clinic	14	1.5	0.5	1	0.1	0.1
Public health ward	0	0.0	0	0	0.0	0
Private medical ward	0	0.0	0	0	0.0	0
Other	5	0.9	0.4	4	0.5	0.3
Don't know	0	0	0	0	0	0
Decline to respond	0	0	0	0	0	0

Table 6.10: Transportation to place of delivery for most recent birth in the last two years, among women 15-49 years of age who delivered in a facility

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Private vehicle	322	513	63.0	3.0	290	648	45.2	3.0
Other public transit	105	513	19.6	2.5	178	648	27.6	2.4
Ambulance	68	513	13.4	1.8	159	648	23.9	2.5
On foot	45	513	9.7	2.9	52	648	7.7	2.0

*categories not mutually exclusive (select all that apply)

Women were asked about the proximity to the health facility used to deliver. Of the 648 women from the second follow-up who delivered in a facility, 331 were able to estimate the distance to the facility (Table 6.11). The median number of women reported travelling less than 12 km. Fifty percent of women traveled more than two hours to the facility to deliver.

Table 6.11: Proximity to health care facilities: health facility for delivery

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Distance, km	67	446	0	4.5	20	31.5	100
Travel time, min	479	34	1	60	120	180	5400
Second follow-up 2017							
Distance, km	331	317	0	4	12	45	300
Travel time, min	615	33	1	40	120	180	2400

6.2.2 *Assistance at delivery*

The assistance a woman receives during childbirth has important health consequences for both mother and child. For women who did not deliver alone in the last two years (98.4% of all births in the second follow-up), the percentage by type of delivery attendant is detailed in Table 6.12. Among women who did not report being alone for delivery, several categories of personnel may have been in attendance. As can be seen in Table 6.12, most in-facility deliveries during the second follow-up were accompanied by a medical doctor (86.8%) and/or a professional nurse (60.2%). For 44.4% of the deliveries an auxiliary nurse was in attendance. For 9.6% a midwife/comadrona was in attendance.

Table 6.12: Types of attendants: assistance at delivery for most recent birth in the last two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Medical doctor	483	665	71.6	3.8	619	710	86.8	2.1
Professional nurse	312	660	47.1	3.2	425	700	60.2	3.3
Auxiliary nurse	276	654	42.0	3.0	300	693	44.4	3.3
Midwife/comadrona	117	660	18.8	3.3	65	703	9.6	1.8
Laboratory technician	14	659	2.0	0.7	20	697	2.7	0.8
Traditional healer	2	663	0.3	0.2	6	705	1.7	1.4
Relative	55	663	8.6	1.8	11	704	1.7	0.5
Community health worker	3	663	0.3	0.2	3	704	0.4	0.2
Pharmacist	2	663	0.2	0.2	1	704	0.2	0.2
Other	3	663	0.4	0.2	6	704	0.7	0.4

Twenty eight percent of women in the second follow-up delivered with one attendant, 39.9% with two attendants, and 25.5% with three attendants (Table 6.13). For women's most recent live birth in the past two years, 91.4% of deliveries had a skilled attendant present and 89.7% delivered with a skilled attendant in a health facility (Table 6.14).

Table 6.13: Number of attendants: assistance at delivery for most recent birth in the last two years, women 15-49 years of age

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
None	5	0.8	0.4	9	1.6	0.7
One	250	38.6	3.0	201	28.1	3.2
Two	237	33.6	3.3	288	39.9	3.5
Three	162	25.3	2.8	179	25.5	2.2
Four or more	12	1.7	0.6	33	4.9	1.5
Don't know	0	0	0	0	0	0
Decline to respond	0	0	0	0	0	0

Table 6.14: In-facility delivery with skilled birth attendant: assistance at delivery for most recent birth in the last two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Delivery with a skilled birth attendant	511	666	75.6	3.9	655	709	91.4	2.1
Delivery with a skilled birth attendant in any health facility	507	666	74.9	3.9	643	709	89.7	2.1
Delivery with a skilled birth attendant in a CMI or hospital	462	666	68.6	3.8	608	709	84.7	2.8

6.2.3 *Complications*

Pregnancy complications are an important source of maternal and child morbidity and mortality. The type of delivery (vaginal or Caesarian section) among women with births in the last two years is detailed in Table 6.15 along with the percentage of planned in-facility deliveries. Table 6.16 displays the percentage of women with specific complications.

As previously described, the vast majority of births occurred in institutional settings. In 44.3% of these cases during the second follow-up, women indicated that they attended the facility for emergency care. Few women reported seizures prior to delivery (3.4%). Approximately 11.1% of infants were transferred to an intensive care unit after delivery, and 17.5% of women reported excessive bleeding after delivery (more than 1 cup over a two-day period of time).

Table 6.15: Mode of delivery for most recent birth in the last two years, women 15-49 years of age

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Mode of delivery						
Vaginal	584	89.7	1.4	587	83.4	1.8
Emergency c-section	55	7.5	1.2	72	10.1	1.4
Planned c-section	25	2.8	0.7	50	6.4	1.2
Don't know	0	0	0	1	0	0
Decline to respond	0	0	0	0	0	0
Reason for seeking delivery care, among in-facility births						
According to birth plan	295	58.6	3.8	363	55.0	2.9
Because of emergency	217	41.4	3.8	279	44.3	2.8
Other reason	0	0.0	0	5	0.7	0.4
Don't know	0	0	0	1	0	0
Decline to respond	0	0	0	0	0	0

Table 6.16: Delivery complications for most recent birth in the last two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Respondent experienced excessive bleeding in the first day after delivery	169	659	25.8	2.9	126	707	17.5	1.9
Child entered neonatal intensive care unit after delivery	55	659	8.2	1.2	79	710	11.1	1.8
Respondent experienced seizures prior to delivery	30	662	4.5	0.8	23	710	3.4	0.7

6.2.4 *Birth size and weight*

Birth weight is a major determinant of infant and child health and mortality. Birth weight of less than 2.5 kilograms is considered low. For all births during the five-year period preceding the survey, mothers were asked about their perception of the child's size at birth: very large, larger than average, smaller than average, or very small. They were then asked to report the actual weight in kilograms if the child had been weighed after delivery. To reduce recall bias, only data from the most recent birth within the last two years are summarized below (Table 6.17).

In the second follow-up, many women perceived their infant to be average in size (72.6%). With most births occurring in institutional settings, it is not surprising that 92.3% of newborns were weighed at birth. Among those who were weighed, 13.4% weighed less than 2.5 kilograms according to the mother's recall (low birth weight).

Table 6.17: Birth size and weight for most recent live birth in the past two years, women 15-49 years of age

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Very large	35	5.4	1.2	20	2.7	0.7
Larger than average	94	14.1	1.5	91	13.9	1.4
Average	430	66.9	2.2	494	72.6	1.9
Smaller than average	61	9.5	1.3	51	7.8	1.0
Very small	26	4.1	0.7	19	3.1	0.8
Don't know	17	0	0	35	0	0
Decline to respond	1	0	0	0	0	0

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Child was weighed at birth	504	629	78.5	3.7	640	690	92.3	1.6
Low birth weight (<2.5kg), among those weighed	55	386	13.5	1.8	54	394	13.4	1.8

6.3 Early initiation of breastfeeding

Coverage of early initiation of breastfeeding is defined as the percentage of women who had a live birth in the past two years and put the child to the breast with one hour of birth. Table 6.18 shows that 84.9% of women initiated breastfeeding within one hour of birth.

Table 6.18: Early initiation of breastfeeding for most recent live birth in the past two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Early initiation of breastfeeding	494	660	73.8	2.5	590	701	84.9	1.9

6.4 Postnatal Care

Postnatal care is important both for the mother and the child to treat complications arising from the delivery, as well as to provide the mother with important information on how to care for herself and her child. The postnatal period is defined as the time between the delivery of the placenta and 42 days (six weeks) following the delivery. The timing of postnatal care is important: the first two days after delivery are critical, because most maternal and neonatal deaths occur during this period.

Characteristics of postnatal care, including timing, location, and personnel providing care were captured for all births in the five years preceding the survey. To reduce recall bias, only data from the most recent delivery in the last two years are summarized in the tables below.

6.4.1 *Postnatal checkup for the mother*

Data on postnatal care for the mother are summarized in Table 6.19. Table 6.19 shows the percentage of women with a birth in the last two years who were checked at any time after delivery and within one week after delivery; and percentage by timing of the check for women with an in-facility delivery.

Only 78% of women recalled being checked after delivery during the second follow-up, and 60.4% reported being checked one week after delivery by a health care provider. Only 52.5% of women with an institutional birth recalled being checked every 15 minutes for the first hour post-partum.

Table 6.20 shows the percent distribution of women who were checked at any time after delivery by type of personnel. Among women with postnatal care visits in the second follow-up, most received care from a doctor (80.6%) or professional nurse (11.3%).

Table 6.19: Postnatal checkup for the mother for most recent live birth in the past two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Any checkup after delivery	448	662	64.8	3.6	542	710	78.0	3.2
Checked every 15 minutes during the first hour after delivery, among in-facility births	151	381	40.2	4.5	259	497	52.5	3.2
Checked within a week after delivery by a skilled provider	319	662	47.0	3.3	424	710	60.4	3.5

Table 6.20: Provider of care at first postnatal checkup for the mother, most recent live birth in the past two years, among women who attended at least one postnatal care visit

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Doctor	332	74.7	2.3	441	80.6	2.5
Professional nurse	49	11.7	1.9	57	11.3	2.1
Auxiliary nurse	57	11.8	2.1	39	7.5	2.3
Midwife/comadrona	6	1.3	0.5	2	0.3	0.2
Relative	0	0.0	0	1	0.2	0.2
Laboratory technician	0	0.0	0	0	0.0	0
Community health worker	2	0.5	0.3	0	0.0	0
Pharmacy assistant	0	0.0	0	0	0.0	0
Traditional healer	0	0.0	0	0	0.0	0
Other	0	0.0	0	0	0.0	0
Don't know	1	0	0	2	0	0
Decline to respond	1	0	0	0	0	0

6.4.2 *Postnatal checkup for the infant*

The results regarding postnatal care for the neonate are shown in Table 6.21: percentage of women with a birth in the last two years whose infants were checked after delivery; percent distributions of infants who were checked by skilled personnel within 24 hours of delivery; and percent distributions of infants who were checked by skilled personnel within one week of delivery.

Approximately 74.4% of women in the second follow-up reported that their infant was checked at any time after delivery. Among all deliveries, 19.8% of women reported that a qualified medical professional checked on their infant within 24 hours of delivery. Table 6.22 shows the attendants for neonatal postnatal care. Most women indicated that a doctor performed a checkup (81.7%). Auxiliary nurse and professional nurse were also reported, though much less frequently.

Table 6.21: Postnatal checkup for neonate for woman's most recent live birth in the past two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Any checkup after delivery	494	651	72.5	3.6	512	695	74.4	2.7
Checked within 24 hours after delivery by a skilled provider	205	597	33.9	2.7	122	624	19.8	3.8
Checked within a week after delivery by a skilled provider	308	597	50.0	3.5	329	624	51.4	3.8

Table 6.22: Provider of care at first postnatal checkup for the infant, woman's most recent live birth in the past two years, among women whose child attended at least one postnatal care visit

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Doctor	366	76.1	3.0	421	81.7	2.6
Auxiliary nurse	55	10.4	1.7	41	8.3	2.3
Professional nurse	57	12.2	2.7	37	8.1	1.6
Community health worker	0	0.0	0	5	1.1	0.6
Midwife/comadrona	6	1.1	0.5	2	0.3	0.2
Relative	1	0.3	0.3	1	0.3	0.3
Laboratory technician	0	0.0	0	0	0.0	0
Pharmacy assistant	0	0.0	0	0	0.0	0
Traditional healer	0	0.0	0	0	0.0	0
Other	0	0.0	0	1	0.2	0.2
Don't know	9	0	0	4	0	0
Decline to respond	0	0	0	0	0	0

6.5 Vouchers, Incentives, and Maternal Waiting Homes

To increase use of their services, some facilities and waiting homes offer vouchers and incentives to women to attend care. Table 6.23 displays the percentage of women in the second follow-up who gave birth the past two years and received a voucher at a health facility. Two percent of women received a voucher or financial assistance to attend antenatal care, 9.3% received a voucher or financial assistance for delivery at a health facility, and 5.2% received a voucher or financial assistance for postpartum or postnatal care at a health facility.

Table 6.23: Voucher incentives for care-seeking for most recent live birth in the past two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Received a voucher or other form of financial assistance to attend antenatal care at a health facility	5	635	0.8	0.3	17	689	2.4	0.7
Received a voucher or other form of financial assistance to deliver at a health facility	45	507	10.1	1.9	64	645	9.3	2.1

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
No voucher	502	97.8	1.1	618	94.8	1.4
Yes, for both woman and infant	4	0.9	0.7	18	3.5	1.2
Yes, for woman's care	6	1.3	0.6	11	1.5	0.7
Yes, for infant's care	0	0.0	0	1	0.2	0.2
Don't know	0	0	0	0	0	0
Decline to respond	0	0	0	0	0	0

Some facilities that attend deliveries have a **casa materna** or maternal waiting home nearby to provide women who live far away a place to stay while they await delivery or while they recover and prepare to travel home with their infant. Table 6.24 displays how women have commonly used maternal waiting homes during their most recent pregnancy in the past two years. 31.8% of women in the second follow-up report using a maternal waiting home before giving birth and 40.1% of these women report receiving counseling while staying at a maternal waiting home. On average, women stayed at a maternal waiting home for two days and spent 0 Lempira.

Table 6.24: Use of maternal waiting homes for most recent live birth in the past two years, women 15-49 years of age

	Second Follow-Up 2017			
	n	N	%	SE
Heard of maternal waiting home	490	708	70.1	3.1
Among women who have heard of maternal waiting homes				
Used a maternal waiting home before giving birth	159	490	31.8	2.8
Among women who used maternal waiting homes				
Received counseling on health and parenting topics while at waiting home	61	153	40.1	5.5

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Second Follow-Up 2017							
Days spent in maternal home	157	0	1	1	2	5	44
Out-of-pocket cost to use maternal home, Lempira	159	0	0	0	0	0	1000

7 Chapter 7: CHILD HEALTH

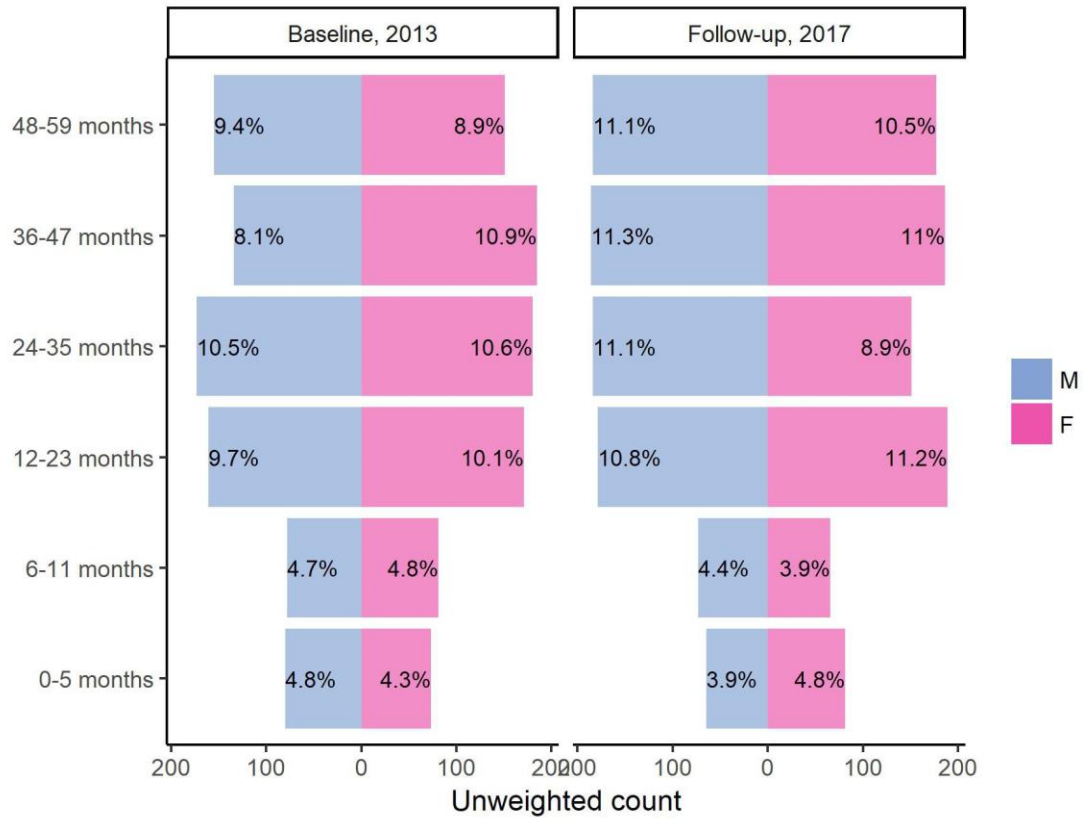
This chapter summarizes the health status of children aged 0-59 months whose caregivers participated in the SMI-Honduras Second Follow-up Household Survey. All data summarized in this chapter are based on the caregiver's report.

7.1 Health status

The age and sex distribution of the de facto population of children aged 0-59 months participating in the caregiver interview module or the anthropometric measures in Honduras is shown in Figure 7.1 by six- or 12-month age groups.

Nineteen percent of children surveyed at baseline and 17% of children surveyed at the second follow-up were under 1 year old at the time of the interview. The age distributions of female and male children are similar.

Figure 7.1: Age and sex of children aged 0-59 months in child health survey or anthropometric measures of the de facto population by six- to twelve-month age groups, unweighted



7.1.1 *Current health status*

Table 7.1 shows the current health status of all children aged 0-59 months, as reported by their caregivers. The table includes the caregiver's evaluation of current health relative to health the previous year and the percentage of children who can easily perform daily activities. In the second follow-up, approximately 74.7% of children's health was considered by their caregiver to be "good," "very good," or "excellent," compared to 71.9% at baseline.

Relative to the past year, caregivers in the second follow-up evaluation reported that 36.4% of children's health was "about the same" in the second follow-up. While 57.9% of children's health had improved, 5.8% of children experienced reportedly worse health on the day of the interview, compared to last year. Ninety two percent of children could "easily" perform their daily activities (e.g., playing and going to school) according to their caregivers. Seven percent of children had some degree of difficulty performing these activities, 0.6% of children had a significant degree of difficulty performing these activities, and 0.6% of children were unable to complete daily activities, according to their caregivers.

Table 7.1: Current health status, among children aged 0-59 months

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Current health status						
Excellent	367	21.4	2.1	442	24.1	2.5
Very good	298	19.4	1.4	255	14.9	1.7
Good	480	31.1	1.9	601	35.7	2.3
Fair	381	23.4	1.2	366	21.5	1.5
Poor	70	4.7	0.7	58	3.7	0.7
Don't know	0	0	0	0	0	0
Decline to respond	0	0	0	0	0	0
Health status relative to a year ago						
Better	701	56.0	1.7	801	57.9	1.9
Worse	51	4.1	0.6	77	5.8	0.7
About the same	493	39.8	1.8	506	36.4	1.8
Don't know	1	0	0	3	0	0
Decline to respond	0	0	0	0	0	0
Ability to perform daily activities						
Easily	1496	94.2	0.8	1589	92.1	1.0
With some difficulty	45	3.0	0.4	111	6.7	0.9
With much difficulty	4	0.2	0.1	9	0.6	0.2
Unable to do	36	2.5	0.6	12	0.6	0.2
Don't know	15	0	0	1	0	0
Decline to respond	0	0	0	0	0	0

7.1.2 *Recent illness*

Caregivers were asked a series of questions about any illnesses or health problems that their children had in the two weeks preceding the interview. In the second follow-up survey, approximately 29% of

children were reported as sick during that time (Table 7.2). Of the 485 children who were recently ill, cough (33.2%), fever (31.3%), and diarrhea without blood (7.5%) were the most commonly specified complaints.

Table 7.2: Recent illness, among children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Child was sick in the last two weeks	532	1596	33.9	1.8	485	1720	28.8	1.7

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Recent illness among children ill in the last 2 weeks						
Cough	156	29.8	2.8	164	33.2	3.4
Fever	156	29.7	2.5	149	31.3	2.3
Diarrhea without blood	56	10.8	1.8	33	7.5	1.8
Skin rash/infection	10	2.2	1.1	16	3.5	0.9
Pneumonia	1	0.1	0.1	7	1.7	0.8
Eye/ear infection	3	0.7	0.4	8	1.7	0.8
Diarrhea with blood	5	0.7	0.3	7	1.6	0.7
Asthma	10	1.8	0.5	3	0.8	0.4
Vomiting	6	1.1	0.4	4	0.7	0.3
Abdominal pain	8	1.6	0.5	4	0.7	0.4
Bronchitis	6	1.1	0.5	1	0.2	0.2
Headache	3	0.6	0.3	1	0.2	0.2
Malaria	0	0.0	0	0	0.0	0
Tuberculosis	1	0.1	0.1	0	0.0	0
Anemia	0	0.0	0	0	0.0	0
Measles	0	0.0	0	0	0.0	0
Jaundice	0	0.0	0	0	0.0	0
Stroke	0	0.0	0	0	0.0	0
Diabetes	0	0.0	0	0	0.0	0
HIV/AIDS	0	0.0	0	0	0.0	0
Paralysis	0	0.0	0	0	0.0	0
Chest infection	0	0.0	0	0	0.0	0
Blood in urine	0	0.0	0	0	0.0	0
Difficulty urinating	0	0.0	0	0	0.0	0
Swelling in legs, ankles, or feet	0	0.0	0	0	0.0	0
Other	111	19.7	3.0	88	16.9	2.0
Don't know	0	0	0	0	0	0
Decline to respond	0	0	0	0	0	0

7.1.3 *Utilization of health services for recent illness*

Table 7.3 summarizes data regarding the utilization of health services among the 485 children who were sick in the two weeks preceding the interview. The table shows the percentage of children 0-59 months who were sick in the last two weeks for whom care was sought for recent illness and among these,

the percent distribution by type of medical facility where care was sought and whether the child was hospitalized.

In the second follow-up survey, care was sought for 44.3% of these cases. Care was typically sought at CESAMO (54.4%) or CESAR (13.5%) facilities; some attended private health clinics (6.8%). Only one child was hospitalized for their recent illness.

Table 7.3: Utilization of health services for recent illness in the last two weeks, among children 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Sought care for recent illness	266	532	48.9	3.3	223	485	44.3	2.8
Child was hospitalized for recent illness	2	97	2.1	1.5	1	75	1.7	1.7

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Type of medical facility where care was sought						
CESAMO	93	33.4	4.2	118	54.4	5.0
CESAR	116	45.8	5.9	29	13.5	3.6
Private health clinic	16	5.6	1.8	18	6.8	2.1
Private doctor's office	8	2.7	0.9	15	6.4	1.7
Pharmacy	4	0.9	0.6	14	5.8	1.4
Community health worker	1	0.5	0.5	9	4.1	1.6
CMI	5	2.2	1.0	5	2.5	1.1
Public hospital	4	1.3	0.7	4	1.9	1.0
Private mobile clinic	0	0.0	0	2	0.7	0.5
Private hospital	0	0.0	0	1	0.5	0.5
Public mobile clinic	0	0.0	0	1	0.4	0.4
Other public health facility	3	1.2	0.7	1	0.4	0.4
Other private health facility	0	0.0	0	0	0.0	0
Traditional healer	1	0.3	0.3	0	0.0	0
Other	14	6.0	2.4	6	2.6	1.0
Don't know	1	0	0	0	0	0
Decline to respond	0	0	0	0	0	0

7.2 Acute respiratory infection

Acute respiratory infection is a leading cause of morbidity and mortality among children. Early diagnosis and treatment with antibiotics can prevent deaths resulting from pneumonia, a common acute respiratory disease. The prevalence of acute respiratory infection was estimated by asking caregivers whether their children aged 0-59 months had been ill with a cough accompanied by short, rapid breathing in the two weeks preceding the interview. If the child had symptoms of an acute respiratory infection, the caregiver was asked about what was done to treat the symptoms and feeding practices during the illness.

7.2.1 *Prevalence of acute respiratory infection and fever*

The prevalence of cough, suspected acute respiratory infection, and fever among children aged 0-59 months, as reported by their caregivers, is displayed in Table 7.4. In the second follow-up, 22% of children experienced cough, 11.7% had symptoms of an acute respiratory infection, and 19.8% had a fever in the two weeks preceding the interview.

Table 7.4: Prevalence of suspected acute respiratory infection and fever in the last two weeks, among children 0-59 months

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Child had cough in the last two weeks, by type						
No cough	1195	74.4	1.6	1356	78.2	1.5
Cough without difficulty breathing	211	13.5	1.2	172	10.1	1.1
With difficulty breathing due to chest problem	99	6.5	1.0	84	5.1	0.6
With difficulty breathing due to congested/runny nose	49	3.2	0.5	66	3.9	0.6
With difficulty breathing due to chest problem and congested/runny nose	39	2.3	0.4	42	2.7	0.5
With difficulty breathing due to other reason	1	0.1	0.1	0	0.0	0
Don't know	2	0	0	2	0	0
Decline to respond	0	0	0	0	0	0

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Symptoms of acute respiratory infection in the last two weeks	188	1594	12.1	1.1	193	1721	11.7	1.0
Fever in last two weeks	329	1596	21.4	1.7	327	1716	19.8	1.2

7.2.2 *Utilization of health services for suspected acute respiratory infection*

Forty four percent of children with symptoms of acute respiratory infection were taken for evaluation and/or treatment of their condition at the second follow-up (Table 7.5).

Table 7.5: Utilization of health services for suspected acute respiratory infection in the last two weeks, among children 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Sought care for suspected acute respiratory infection	261	494	52.1	2.8	215	477	43.6	2.9

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Type of medical facility where care was sought						
CESAMO	91	33.5	4.4	107	50.0	4.5
CESAR	113	45.1	5.5	34	17.4	4.2
Pharmacy	5	1.6	0.8	19	8.1	1.9
Private health clinic	17	6.1	1.9	20	7.8	2.3
Private doctor's office	6	1.9	0.7	12	5.1	1.6
Community health worker	2	0.9	0.6	8	3.8	1.6
Public hospital	1	0.3	0.3	4	2.5	1.2
CMI	5	2.2	1.0	3	1.6	0.9
Other public health facility	3	1.2	0.7	2	0.8	0.5
Private hospital	0	0.0	0	1	0.5	0.5
Private mobile clinic	1	0.2	0.2	1	0.4	0.4
Public mobile clinic	0	0.0	0	0	0.0	0
Other private health facility	0	0.0	0	0	0.0	0
Traditional healer	2	0.8	0.6	0	0.0	0
Other	14	6.1	2.3	4	2.0	1.0
Don't know	1	0	0	0	0	0
Decline to respond	0	0	0	0	0	0

7.2.3 *Utilization of medications for suspected acute respiratory infection*

Eighty percent of children with symptoms of acute respiratory infection were given some type of medication for their condition during the second follow-up (Table 7.6). Forty six percent of children were administered antibiotic syrups for a suspected acute respiratory infection. Acetaminophen (71.4%) and ibuprofen (6.6%) were also commonly administered. Twenty six percent of children received a treatment other than those listed.

Table 7.6: Utilization of medications for suspected acute respiratory infection in the last two weeks, among children 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Any treatment	410	493	82.6	2.3	382	478	79.8	2.9
Antibiotic injection	30	408	7.2	1.3	22	381	5.9	1.4
Antibiotic pill	24	408	6.0	1.2	31	381	8.4	1.8
Antibiotic syrup	216	408	50.8	3.3	183	381	46.5	3.4
Aspirin	8	407	1.8	0.6	4	381	1.1	0.5
Acetaminophen	289	409	69.5	2.3	273	382	71.4	2.2
Ibuprofen	44	408	10.1	1.9	24	380	6.6	1.3
Oral rehydration therapy	9	408	2.3	0.9	9	381	2.5	1.1
Other	92	408	24.7	3.4	100	381	25.8	3.2

7.2.4 *Feeding practices during suspected acute respiratory infection*

Data on feeding practices during the recent episode of suspected acute respiratory infection are summarized in Table 7.7. The table shows the volume of fluids and the volume of solids given during the illness. At the second follow-up, only 19.4% of children were given more fluids than usual. In total, 47% of children were offered less fluid than usual (or none at all). Twenty six percent of children were offered the same volume of solid food as usual during their illness. Approximately 72% of children were given less than the usual amount of solid food (or none at all).

Table 7.7: Feeding practices during suspected acute respiratory infection in the last two weeks, among children 0-59 months

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Volume of fluids (including breastmilk) given during illness						
No fluids	12	2.5	0.8	12	2.7	0.9
Much less	56	11.4	1.8	51	10.9	1.6
Somewhat less	142	28.4	2.5	157	33.2	3.2
About the same	238	49.0	3.3	163	33.7	2.6
More	45	8.7	1.4	92	19.4	2.5
Don't know	1	0	0	3	0	0
Decline to respond	0	0	0	0	0	0
Volume of solid foods given during illness						
No solids	19	3.8	0.8	40	8.8	1.9
Much less	87	18.5	2.5	69	15.2	2.1
Somewhat less	208	40.3	2.9	228	47.8	3.0
About the same	169	35.9	2.9	126	26.2	2.2
More	7	1.4	0.5	8	2.0	0.7
Don't know	4	0	0	5	0	0
Decline to respond	0	0	0	2	0	0

7.3 Diarrhea

Dehydration caused by severe diarrhea in a major cause of morbidity and mortality among children. Exposure to diarrheal disease-causing agents is frequently a result of use of contaminated water and unhygienic practices related to food preparation and disposal of feces. The prevalence of diarrhea was estimated by asking caregivers whether their children aged 0-59 months had had diarrhea in the two weeks preceding the interview. If the child had had diarrhea, the caregiver was asked about treatment and feeding practices during the diarrheal episode.

7.3.1 *Prevalence*

Table 7.8 shows the proportion of children aged 0-59 months with diarrhea in the two weeks preceding the interview, as reported by their caregivers (32.1% at the second follow-up). Five percent of children had bloody diarrhea.

Table 7.8: Prevalence of diarrhea in the last two weeks, among children aged 0-59 months

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
No diarrhea	133	62.2	4.1	119	67.9	4.9
Diarrhea without blood	72	35.7	4.1	42	27.4	4.4
Diarrhea with blood	5	2.1	1.0	7	4.6	2.6
Don't know	10	0	0	7	0	0
Decline to respond	0	0	0	0	0	0

7.3.2 *Utilization of health services for diarrhea*

Nearly half of children with diarrhea were taken for evaluation and/or treatment of their condition (Table 7.9). Care for these children was often sought in the public sector, although private health centers were visited by 11% of these cases at the second follow-up.

Table 7.9: Utilization of health services for diarrhea in the last two weeks, among children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Sought care for diarrhea	34	77	43.6	6.8	25	49	48.6	8.5

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Type of medical facility where care was sought						
CESAMO	13	41.5	11.1	17	70.4	12.1
CESAR	14	40.5	12.0	3	11.2	7.0
Private doctor's office	1	3.3	3.1	2	8.3	6.1
CMI	0	0.0	0	1	4.5	4.6
Community health worker	0	0.0	0	1	3.0	3.1
Private mobile clinic	0	0.0	0	1	2.5	2.6
Public hospital	1	2.5	2.5	0	0.0	0
Public mobile clinic	0	0.0	0	0	0.0	0
Other public health facility	1	3.8	3.6	0	0.0	0
Private hospital	0	0.0	0	0	0.0	0
Private health clinic	0	0.0	0	0	0.0	0
Other private health facility	0	0.0	0	0	0.0	0
Pharmacy	3	5.1	3.7	0	0.0	0
Traditional healer	0	0.0	0	0	0.0	0
Other	1	3.3	3.1	0	0.0	0
Don't know	0	0	0	0	0	0
Decline to respond	0	0	0	0	0	0

7.3.3 *Utilization of treatments for diarrhea*

A simple and effective response to dehydration caused by diarrhea is a prompt increase in the child's fluid intake through some form of oral rehydration therapy. Oral rehydration therapy may include the use of a solution prepared from commercially produced packets of powdered oral rehydration salts, commercially-produced bottled oral serums, or homemade fluids usually prepared from sugar, salt, and water. Other treatments, including zinc, may be administered as well.

Although care was sought in only 48.6% of diarrhea cases, 88.7% of cases were given some form of treatment at the second follow-up. Bottled oral rehydration serum was the most common form oral rehydration therapy (39.7%). Ten percent of cases were treated with zinc syrup or pills. Six percent of cases were treated with an antibiotic pill.

Table 7.10: Utilization of treatments for diarrhea during the last two weeks, among children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Any treatment	66	77	84.6	4.1	43	48	88.7	3.3
Fluids								
Bottled oral rehydration serum	11	77	12.9	4.0	20	48	39.7	7.8
Fluid made with powdered oral rehydration salts	30	77	37.8	7.1	19	48	38.8	8.7
Homemade fluid recommended by health authorities	17	77	21.0	6.0	7	48	13.7	6.3
Medications								
Antibiotic pill	16	77	21.6	6.5	3	49	5.9	4.4
Antidiarrheal pill	8	77	10.6	2.9	10	49	18.7	5.5
Zinc pill	3	77	3.5	1.8	3	49	6.0	4.1
Other type of pill	4	76	5.0	2.2	1	49	2.3	2.1
Unknown pill	4	76	5.7	3.2	0	49	0.0	0
Antibiotic injection	1	76	1.1	1.1	0	48	0.0	0
Non-antibiotic injection	0	76	0.0	0	0	48	0.0	0
Unknown injection	1	77	1.8	1.9	1	48	2.4	2.2
Intravenous therapy	0	77	0.0	0	0	49	0.0	0
Home remedy/herbal medicine	16	77	21.6	5.4	13	49	27.8	7.5
Antibiotic syrup	18	77	24.3	4.7	3	49	4.7	2.6
Antidiarrheal syrup	8	77	10.2	3.9	3	49	6.0	3.2
Zinc syrup	1	77	2.1	2.1	2	49	4.5	2.5
Other syrup	0	77	0.0	0	2	48	4.7	4.2
Unknown syrup	2	77	2.9	1.8	1	49	2.4	2.1
Other treatment	14	77	18.6	4.2	8	49	17.3	6.9

7.3.4 *Feeding practices during diarrhea*

Caregivers are encouraged to continue feeding children normally when they suffer from diarrheal diseases and to increase the fluids they are given. These practices help to prevent dehydration and minimize the adverse consequences of diarrhea on the child's nutritional status.

Data on feeding practices during the recent diarrheal episode are summarized in Table 7.11. The table shows the volume of fluids and the volume of solids given during the illness. Only 29.8% of children were given more fluids than usual in the second follow-up survey. Approximately 44% of children were offered less fluid than usual (or none at all). Eight percent of children were offered the same volume of solid food as usual during their illness. Approximately 86% of children were given less than the usual amount of solid food (or none at all).

Table 7.11: Feeding practices among children aged 0-59 months who had diarrhea in the last two weeks

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Volume of fluids (including breastmilk) given during illness						
No fluids	0	0.0	0	0	0.0	0
Much less	12	13.4	3.1	5	9.1	4.5
Somewhat less	23	31.0	6.9	17	34.7	6.5
About the same	34	45.4	6.5	12	26.3	7.8
More	8	10.2	3.5	14	29.8	6.4
Don't know	0	0	0	1	0	0
Decline to respond	0	0	0	0	0	0
Volume of solid foods given during illness						
No solids	5	7.6	3.4	10	22.5	6.1
Much less	12	14.0	4.0	14	28.7	5.8
Somewhat less	35	47.8	4.1	17	34.4	7.4
About the same	23	29.1	4.7	5	8.5	3.6
More	1	1.5	1.4	2	5.9	3.9
Don't know	1	0	0	1	0	0
Decline to respond	0	0	0	0	0	0

7.4 Immunization against common childhood illnesses

Information on immunization coverage was collected for all children aged 0-59 months whose caregivers participated in the survey. Both caregiver's report and review of vaccination card (if available) were used to determine coverage. A vaccination card was available for review for 1,584 children at the second follow-up (92% of the sample, unweighted). In Table 7.12, coverage is estimated by vaccine type to include all children with full compliance for age as specified in the national immunization scheme at the time of the survey, according to either an affirmative response from the caregiver that the immunization was received, or a mark that the immunization was received on the vaccination card (for children with a vaccination card available for review at the time of the interview). Children too young to have received a specific vaccine are counted as covered in order to maintain a comparable all-ages sample across vaccine types.

Table 7.12: Immunization against common childhood illnesses, children aged 0-59 months, according to caretaker recall and vaccination card

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
BCG vaccine (tuberculosis)	1483	1511	98.0	0.5	1663	1678	99.1	0.3
Hepatitis B vaccine	1177	1507	77.0	2.4	1564	1668	93.4	1.1
Polio vaccine	1122	1515	75.1	1.9	1339	1680	79.0	2.3
Pentavalent vaccine (DPT, HepB, HiB)	1338	1510	89.0	1.2	1603	1682	95.5	0.7
Rotavirus vaccine	1055	1504	70.4	1.5	1562	1673	93.0	1.0
Pneumococcal conjugate vaccine	1478	1570	94.3	0.7	1561	1670	93.6	0.9
Measles, mumps, and rubella (MMR) vaccine	1464	1525	96.0	0.6	1655	1680	98.4	0.5
Diphtheria, tetanus, and pertussis (DPT) vaccine	1215	1525	80.0	1.4	1501	1678	89.5	1.0

*Pneumonia vaccine was added to national vaccine scheme two years before baseline measurement, so children 24 months of age and older at baseline are compliant without receiving pneumonia vaccine.

In Table 7.13, coverage estimates based on recall are summarized for the full sample, and coverage estimates based on vaccination card data are summarized among the subset with a vaccination card available for review. When considering only caregivers' recall, only 7.3% of children aged 0-59 months were fully immunized for age at the second follow-up survey, reflecting many "Don't know" or "Decline" responses that call into question the reliability and validity of the caregiver recall data. Caregivers were able to definitively answer the entire vaccine recall section for only 915 children at the second follow-up. Immunization coverage for children 0-59 months based only upon the vaccine card is 68.5%, and when combined with recall-based information, the estimate of full vaccination for age among children 0-59 months is 60.1%.

Table 7.13: Full immunization compliance for age, children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
According to recall + card	613	1495	41.1	1.9	1148	1655	68.5	2.2
According to vaccine card	366	1578	22.7	1.5	1035	1720	60.1	2.1
According to caregiver's recall	27	684	3.9	0.7	75	915	7.3	1.8

*Pneumonia vaccine was added to national vaccine scheme two years before baseline measurement, so children 24 months of age and older at baseline are compliant without receiving pneumonia vaccine.

7.5 Deworming treatment

Administration of deworming treatment every six months has been shown to reduce the prevalence of anemia in children. Only 26.8% of children aged 12-59 months received at least two doses of deworming treatment in the year preceding the second follow-up interview (Table 7.14).

Table 7.14: Deworming treatment among children aged 12-59 months

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
No deworming	377	31.0	2.1	381	27.6	1.8
One dose	375	29.5	1.7	635	45.6	1.7
Two or more doses	483	39.5	2.4	363	26.8	1.6
Don't know	11	0	0	6	0	0
Decline to respond	0	0	0	0	0	0

8 Chapter 8: INFANT AND YOUNG CHILDREN FEEDING PRACTICES

This chapter summarizes the feeding practices of infants and children aged 0-59 months whose caregivers participated in the SMI-Honduras Household Survey. All data summarized in this chapter are based on the caregiver's report.

8.1 Breastfeeding

8.1.1 *Exclusive breastfeeding*

Coverage of exclusive breastfeeding is defined as the percentage of infants born in the six months prior to the survey who received only breast milk during the previous day. This information is obtained through a 24-hour dietary recall in which the caregiver indicates what the child consumed during the previous day and night. In Honduras during the second follow-up, the sample includes 146 children who are under 6 months of age, and 74 of those children have sufficiently complete dietary recall information to determine whether they are exclusively breastfed. Table 8.1 shows that 51.8% of children under 6 months of age are exclusively breastfed.

8.1.2 *Continued breastfeeding at 1 year*

Coverage of continued breastfeeding at 1 year is defined as the percentage of children 12-15 months old who received breast milk during the previous day according to caregiver's dietary recall. In Honduras during the second follow-up, the sample includes 133 children who are between 12 and 15 months of age, and 104 of those children have adequate responses to determine their breastfeeding status. Table 8.1 shows that 78.2% of children continue to receive breast milk at 1 year.

Table 8.1: Breastfeeding among children

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Exclusive breastfeeding among children <6 months	80	152	54.8	4.4	74	145	51.8	5.4
Continued breastfeeding at one year among children 12-15 months	98	118	82.4	3.5	104	133	78.2	3.9

8.2 Acceptable diet

8.2.1 *Introduction of solid, semi-solid, or soft foods*

Coverage of appropriate introduction of solid foods is measured as the percentage of infants 6-8 months of age who received solid or semi-soft foods during the previous day according to caregiver's dietary recall. In Honduras during the second follow-up, the sample includes 57 children who are 6-8 months of age, and 50 of those children have sufficiently complete dietary recall information. Table 8.2 shows that 88.1% of children consumed solid or semi-soft foods.

8.2.2 *Dietary diversity*

Coverage of minimum dietary diversity is measured as the percentage of children 6-23 months of age who received foods from at least four food groups during the previous day according to caregiver's dietary recall. In Honduras during the second follow-up, the sample includes 507 children who are 6-23 months of age, and 287 of those children have sufficiently complete dietary recall information to determine dietary diversity. Table 8.2 shows that 56.6% of children achieved the minimum dietary diversity during the previous day.

8.2.3 *Meal frequency*

Coverage of minimum meal frequency is measured as the percentage of children 6-23 months of age who received solid foods at least the minimum number of times the previous day, based on age and breastfeeding status. For breastfed children, the minimum is two times for children 6-8 months of age and three times for children 9-23 months of age. For non-breastfed children, the minimum number is four times for all children 6-23 months of age. This information is obtained through caregiver's dietary recall. In Honduras during the second follow-up, the sample includes 507 children who are 6-23 months of age, and 327 of those children have sufficiently complete dietary recall information to determine meal frequency. Table 8.2 shows that 65.2% of children achieved the minimum meal frequency during the previous day.

8.2.4 *Minimum acceptable diet*

Coverage of minimum acceptable diet is measured for children 6-23 months of age. For breastfed children to meet the minimum acceptable diet they must have had at least the minimum dietary diversity and the minimum meal frequency during the previous day. For non-breastfed children to meet the minimum acceptable diet they must have had at least two milk feedings, as well as at least the minimum dietary diversity (not including milk feedings) and the minimum meal frequency during the previous day. This information is obtained through caregiver's dietary recall. In Honduras during the second follow-up, the sample includes 507 children who are 6-23 months of age, and 189 of those children have sufficiently complete dietary recall information to determine minimum acceptable diet. Table 8.2 shows that 37% of children achieved the minimum acceptable diet during the previous day.

8.2.5 *Consumption of iron-rich or iron-fortified foods*

Consumption of iron-rich foods is measured as the percentage of children 6-23 months of age who receive an iron-rich food (e.g., liver, beef, or fish), an iron supplement, or a fortified food that is specially designed for infants and young children, or a food fortified in the home with a product that included iron during the previous day. This information is obtained through caregiver's dietary recall. In Honduras during the second follow-up, the sample includes 507 children who are 6-23 months of age and 300 of those children have sufficiently complete dietary recall information to determine iron consumption. Table 8.2 shows that 58.7% of children consumed an iron-rich food during the previous day.

Table 8.2: Acceptable diet among children 6-23 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Introduction of solid foods among children 6-8 months	67	76	87.0	4.2	50	57	88.1	4.9
Minimum meal frequency among children 6-23 months	296	474	61.6	3.1	327	498	65.2	3.0
Consumption of iron-rich foods among children 6-23 months	227	481	43.7	3.5	300	507	58.7	3.5
Minimum dietary diversity among children 6-23 months	199	481	39.4	2.8	287	507	56.6	3.9
Minimum acceptable diet among children 6-23 months	129	480	25.8	2.7	189	504	37.0	3.4

8.3 Micronutrient supplementation

8.3.1 *Vitamin A*

Interviewers asked the caregiver if their child received a dose of vitamin A in the last six months. Table 8.3 shows that of the 1,722 sampled children 0-59 months of age in the second follow-up, 72% received a dose of vitamin A in the last six months.

8.3.2 *Iron*

Interviewers showed the caregiver photos of common types of bottles, powders, or syrups and asked if their child received iron pills, powder, or syrup in the last day. Table 8.3 shows that of the 1,722 children 0-59 months of age in the second follow-up sample, 24.7% received a dose of iron in the last day.

Table 8.3: Vitamin A and Iron consumption among children 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Vitamin A in the last six months	1097	1535	71.1	1.7	1235	1683	72.0	2.1
Iron supplement the previous day	354	1590	20.7	1.4	438	1717	24.7	1.8

8.3.3 *Packets of micronutrients*

Interviewers showed the caregiver a card with packets of micronutrients (chispitas) and asked how many packets their child received from a health facility and consumed in the last six months. Children are intended to take 60 consecutive daily doses of micronutrient powder in each of three rounds, beginning at age 6, 12, and 18 months, with an adequate consumption considered to be 50 packets. Table 8.4 shows that among children 6-23 months of age sampled in the second follow-up, 30.7% received no packets of micronutrients from a health facility in the last six months.

Table 8.4: Micronutrient powders among children 6-23 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Received any micronutrient packets from health facility in the last six months	105	477	19.9	2.3	358	506	69.3	3.4
Consumed any micronutrient packets	105	478	19.8	2.3	344	496	67.9	3.5
Consumed adequate dose (>=50 packets) of micronutrient powders	1	478	0.1	0.1	153	496	29.5	3.0

* Identical questions were asked in baseline and second follow-up surveys, but the second follow-up interview included photos of the micronutrient products. The baseline survey predated the intervention, so it is possible that questions about receipt and consumption were interpreted by caregivers to include different types of micronutrient supplements at baseline.

9 CHAPTER 9: NUTRITIONAL STATUS IN CHILDREN

The nutritional status of children aged 0-59 months is an important outcome measure of children's health. The SMI-Honduras Second Follow-up Household Survey collected data on the nutritional status of children by measuring the height and weight of all children aged 0-59 months residing in surveyed households, using standard procedures. Hemoglobin levels of these children were also assessed in the field, using a portable HemoCue™ machine, and these data were used to estimate anemia prevalence. As described in Chapter 1, medically trained personnel who were specifically trained to standardize the anthropometric and hemoglobin measurements conducted the testing. This evaluation allows identification of subgroups of the child population that are at increased risk of malnutrition. The parents of anemic children (hemoglobin level <11.0 g/dL, with altitude adjustment) were informed of this result in real-time and were referred for treatment to the appropriate health service.

Three indicators were calculated using the weight and height data – weight-for-age, height-for-age, and weight-for-height. For this report, indicators of the children's nutritional status were calculated using growth standards published by the World Health Organization (WHO) in 2006. The growth standards were generated using data collected in the WHO Multicenter Growth Reference Study. The findings of the study, whose sample included children in six countries (Brazil, Ghana, India, Norway, Oman, and the United States), describe how children should grow under optimal conditions. As such, the WHO Child Growth Standards can be used to assess children all over the world, regardless of ethnicity, social and economic influences, and feeding practices. The three indicators are expressed in standard deviation units from the median in the Multicenter Growth Reference Study.

A total of 1,722 children aged 0-59 months participated in the SMI-Honduras second follow-up. In practice, 1,694 of these children underwent the physical measurement module. Height and weight data are presented for 1,692 of these children (99.9%, unweighted). One thousand five hundred fifty one children 6-59 months of age were eligible for the anemia test. Hemoglobin was measured in 1,433 children (92.4%, unweighted, of children 6-59 months of age). Parental consent was refused for 110 children, three were not measured because anthropometrists could not obtain a sufficient capillary blood sample or any sample at all, and four cases were not tested for other reasons (for example, because the child did not cooperate). The age and sex distribution of children participating in the physical measurement module is displayed in Figure 9.1 and Figure 9.2.

Figure 9.1: Height and weight measured: Age and sex distribution of children measured, children 0-59 months of age of the de facto population

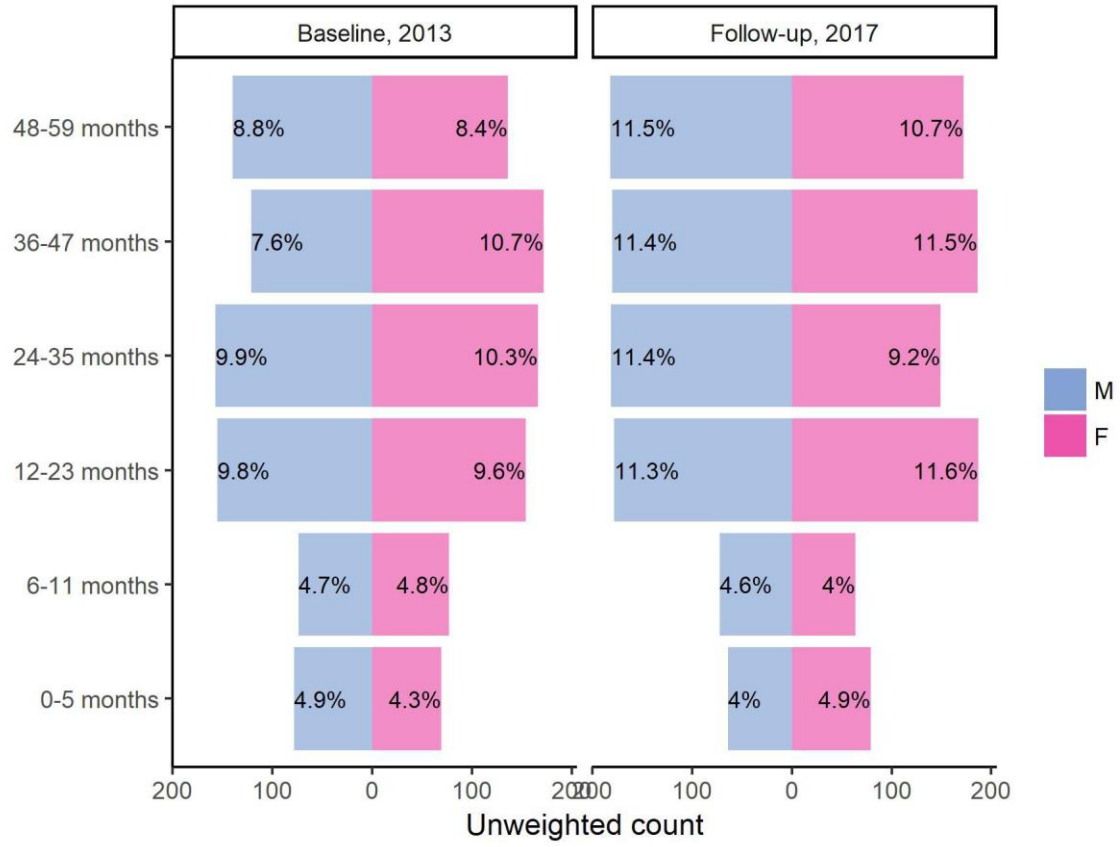


Figure 9.2: Hemoglobin measured: Age and sex distribution of children measured, children 0-59 months of age of the de facto population

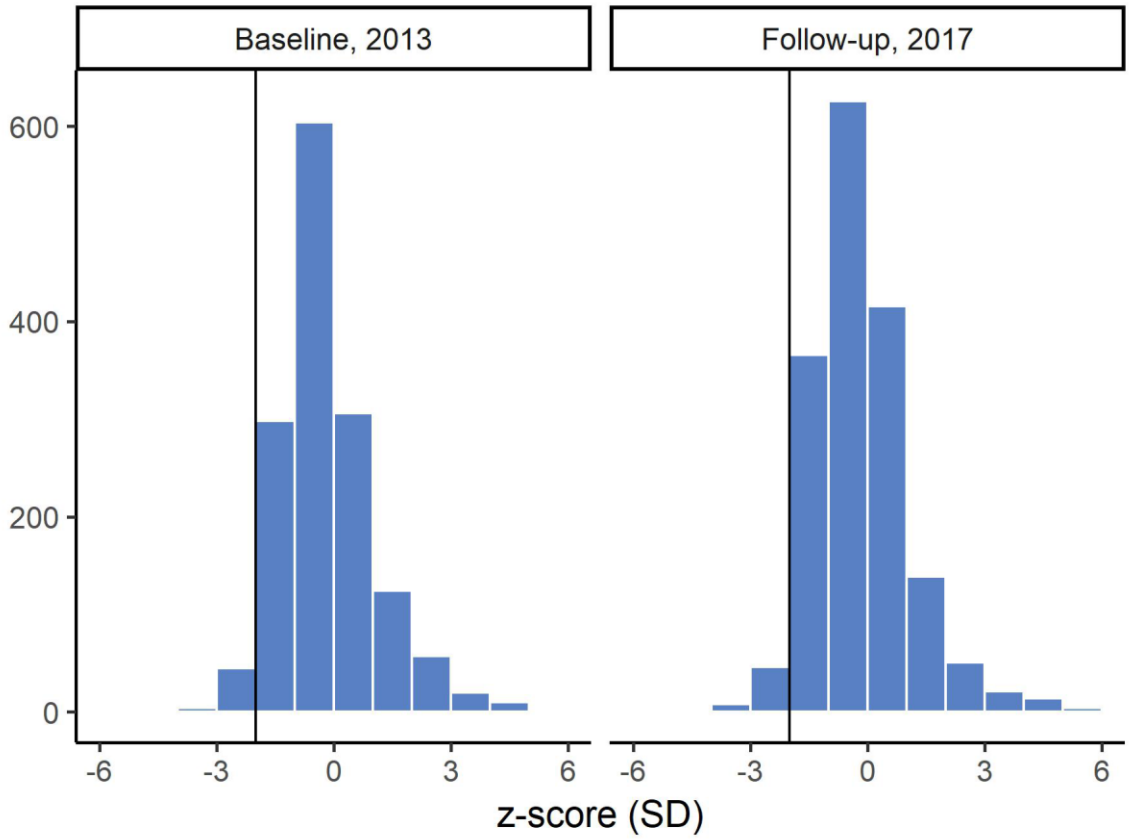
9.1 Weight-for-Age

Weight-for-age is a good overall indicator of a population's general health, as it reflects the effects of both acute and chronic undernutrition. The weight-for-age indicator does not distinguish between chronic malnutrition (stunting) and acute malnutrition (wasting); a child can be underweight because of stunting, wasting, or both. Children with weight-for-age below minus two standard deviations (-2 SD) are classified as underweight. Children with weight-for-age below minus three standard deviations (-3 SD) are considered severely underweight.

9.1.1 *Unweighted distribution of weight-for-age z-scores*

Figure 9.3 shows the distribution of weight-for-age z-scores among all children aged 0-59 months whose measurements were taken. The vertical black lines in the figure denote minus two standard deviations – children to the left of the line are classified as underweight.

Figure 9.3: Distribution of weight-for-age z-scores among children 0-59 months, unweighted



9.1.2 *Prevalence of underweight*

As shown in Table 9.1, 8.3% of children aged 0-59 months in the second follow-up are underweight (have low weight-for-age) and 1.7% are severely underweight. The proportion of underweight children is highest (9.8%) in the age groups 24 to 59 months and lowest (1.2%) among those under 6 months. Female children (7.9%) are less likely to be underweight than male children (8.6%).

Table 9.1: Prevalence of underweight in children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Prevalence of underweight in children 0-59 months, by sex and age (< -2 SD)								
Male	63	719	9.2	1.3	67	857	8.6	1.2
Female	43	765	5.9	0.9	61	837	7.9	1.3
0-5 months	1	144	0.9	0.9	2	143	1.2	0.8
6-11 months	2	150	1.1	0.8	2	136	1.5	1.1
12-23 months	26	307	8.7	1.6	32	365	9.4	1.8
24-59 months	77	883	9.1	1.4	92	1050	9.8	1.4
0-59 months	106	1484	7.5	1.0	128	1694	8.3	1.0
6-23 months	28	457	6.3	1.2	34	501	7.3	1.4
Prevalence of severe underweight in children 0-59 months, by sex and age (< -3 SD)								
Male	11	719	1.4	0.5	14	857	1.8	0.4
Female	10	765	1.4	0.5	13	837	1.7	0.5
0-5 months	1	144	0.9	0.9	1	143	0.7	0.7
6-11 months	1	150	0.5	0.5	1	136	1.0	1.0
12-23 months	5	307	1.4	0.7	7	365	2.2	0.9
24-59 months	14	883	1.6	0.7	18	1050	1.8	0.5
0-59 months	21	1484	1.4	0.4	27	1694	1.7	0.4
6-23 months	6	457	1.1	0.5	8	501	1.9	0.7
Prevalence of high weight for age in children 0-59 months, by sex and age (> 2 SD)								
Male	43	719	6.0	1.0	40	857	4.7	0.8
Female	46	765	5.9	1.0	42	837	5.1	0.8
0-5 months	48	144	34.7	4.1	44	143	32.2	4.2
6-11 months	11	150	6.3	2.1	6	136	4.2	1.6
12-23 months	17	307	5.8	1.5	8	365	2.1	0.7
24-59 months	13	883	1.4	0.4	24	1050	2.0	0.5
0-59 months	89	1484	5.9	0.6	82	1694	4.9	0.6
6-23 months	28	457	6.0	1.2	14	501	2.7	0.7

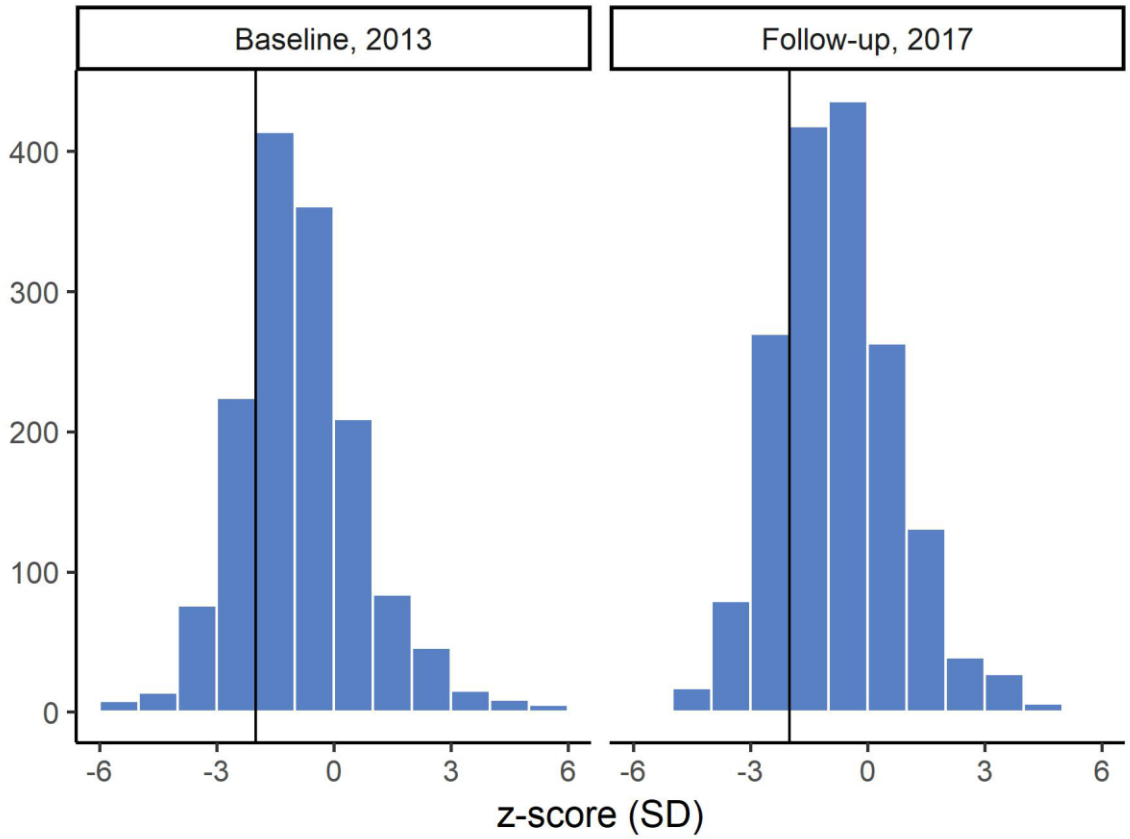
9.2 Height-for-Age

Height-for-age is an indicator of linear growth retardation and cumulative growth deficits in children. Children whose height-for-age z-score is below minus two standard deviations (-2 SD) from the median of the WHO reference population are considered short for their age (stunted) or chronically malnourished. Children who are below minus three standard deviations (-3 SD) are considered severely stunted. Stunting reflects failure to receive adequate nutrition over a long period of time and is affected by recurrent and chronic illness. Height-for-age, therefore, represents the long-term effects of malnutrition in a population and is not sensitive to recent, short-term changes in dietary intake.

9.2.1 *Distribution of height-for-age z-scores*

Figure 9.4 presents the distribution of height-for-age z-scores among all children aged 0-59 months whose measurements were taken. The vertical black lines in the figure denotes minus two standard deviations – children to the left of the line are classified as stunted.

Figure 9.4: Distribution of height-for-age z-scores among children 0-59 months, unweighted



9.2.2 *Prevalence of stunting*

Table 9.2 presents the prevalence of stunting in children aged 0-59 months as measured by height-for-age. In the second follow-up, 23.2% of children under age 5 are stunted and 6.6% are severely stunted. Analysis of the indicator by age group shows that stunting is highest (27.8%) in children 24-59 months and lowest (3.2%) in children aged 0-5 months. Children 12-23 months old have the highest proportion of severely stunted children (8%) while the youngest age group (0-5 months) has the lowest proportion (2%). A higher proportion (25%) of male children is stunted compared with the proportion of female children (21.3%).

Table 9.2: Prevalence of stunting in children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Prevalence of stunting in children 0-59 months, by sex and age (< -2 SD)								
Male	166	718	25.0	3.2	204	855	25.0	2.5
Female	158	762	22.3	2.5	166	837	21.3	2.7
0-5 months	1	144	0.9	0.9	5	143	3.2	1.7
6-11 months	9	150	5.6	2.0	12	135	8.5	2.5
12-23 months	71	305	25.7	3.6	85	365	24.0	3.2
24-59 months	243	881	29.5	3.3	268	1049	27.8	2.9
0-59 months	324	1480	23.6	2.6	370	1692	23.2	2.3
6-23 months	80	455	19.1	2.7	97	500	19.9	2.6
Prevalence of severe stunting in children 0-59 months, by sex and age (< -3 SD)								
Male	55	718	8.7	1.7	60	855	7.8	1.4
Female	45	762	6.8	1.2	41	837	5.5	1.0
0-5 months	1	144	0.9	0.9	3	143	2.0	1.2
6-11 months	2	150	1.3	0.9	3	135	2.6	1.6
12-23 months	22	305	8.2	1.6	27	365	8.0	2.1
24-59 months	75	881	9.7	1.7	68	1049	7.3	1.2
0-59 months	100	1480	7.7	1.2	101	1692	6.6	1.1
6-23 months	24	455	5.9	1.2	30	500	6.6	1.6

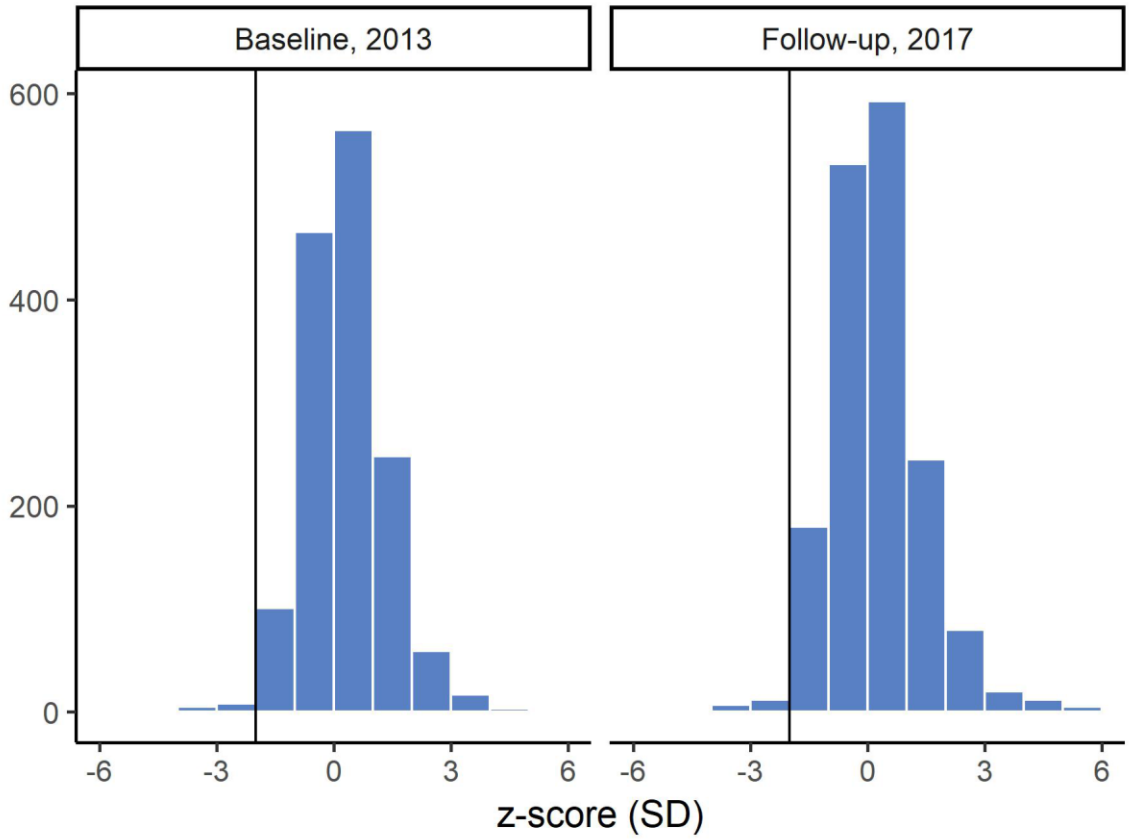
9.3 Weight-for-Height

The weight-for-height indicator measures body mass in relation to body height or length and describes current nutritional status. Children with z-scores below minus two standard deviations (-2 SD) are considered thin (wasted) or acutely malnourished. Wasting represents the failure to receive adequate nutrition in the period immediately preceding the survey and may be the result of inadequate food intake or a recent episode of illness causing loss of weight and the onset of malnutrition. Children with a weight-for-height index below minus three standard deviations (-3 SD) are considered severely wasted. This weight-for-height indicator also provides data on over-weight and obesity. Children more than two standard deviations (+2 SD) above the median weight-for-height are considered overweight or obese.

9.3.1 *Distribution of weight-for-height z-scores*

Figure 9.5 shows the distribution of weight-for-height z-scores among all children aged 0-59 months whose measurements were taken. The vertical black lines in the figure denote minus two standard deviations – children to the left of the line are classified as wasted.

Figure 9.5: Distribution of weight-for-height z-scores among children 0-59 months, unweighted



9.4 Prevalence of Wasting

Table 9.3 shows the breakdown of nutritional status of children aged 0-59 months as measured by weight-for-height by age groups and sex. In the second follow-up, 2.8% of children are wasted and 0.8% of children are severely wasted. Analysis of the indicator by age group shows that wasting is highest (4.6%) in children 12-23 months old and lowest (1.8%) in children aged 6-11 months. Male children are more likely to be wasted than female children (3.4% to 2.2%). Male children are slightly more likely to be severely wasted (0.6%) than females (1%).

Overweight and obesity affect a greater proportion of children in SMI areas Honduras than wasting. In this sample, 5.6% of children are overweight or obese (weight-for-height more than +2 SD). The coexistence of both growth retardation and obesity reveals the burden of malnutrition in Honduras.

Table 9.3: Prevalence of underweight in children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Prevalence of wasting in children 0-59 months, by sex and age (< -2 SD)								
Male	14	718	2.1	0.5	26	853	3.4	0.8
Female	7	762	0.9	0.4	17	837	2.2	0.6
0-5 months	1	144	0.4	0.4	3	142	2.3	1.3
6-11 months	3	150	2.8	1.8	2	135	1.8	1.3
12-23 months	8	305	2.4	0.9	16	365	4.6	1.2
24-59 months	9	881	1.1	0.4	22	1048	2.3	0.6
0-59 months	21	1480	1.5	0.3	43	1690	2.8	0.6
6-23 months	11	455	2.5	0.8	18	500	3.9	1.0
Prevalence of severe wasting in children 0-59 months, by sex and age (< -3 SD)								
Male	7	718	1.0	0.4	5	853	0.6	0.3
Female	5	762	0.7	0.4	8	837	1.0	0.4
0-5 months	0	144	0.0	0	1	142	0.7	0.7
6-11 months	2	150	1.2	0.9	0	135	0.0	0
12-23 months	4	305	1.2	0.6	4	365	1.2	0.5
24-59 months	6	881	0.8	0.3	8	1048	0.8	0.3
0-59 months	12	1480	0.8	0.3	13	1690	0.8	0.2
6-23 months	6	455	1.2	0.5	4	500	0.9	0.4
Prevalence of overweight in children 0-59 months, by sex and age (> 2 SD)								
Male	34	718	4.5	0.9	54	853	6.2	1.0
Female	40	762	5.4	0.8	46	837	5.1	0.9
0-5 months	17	144	12.1	2.9	20	142	12.8	2.9
6-11 months	18	150	12.4	2.6	5	135	3.8	1.6
12-23 months	16	305	5.3	1.5	19	365	5.5	1.3
24-59 months	23	881	2.5	0.5	56	1048	4.9	0.8
0-59 months	74	1480	5.0	0.6	100	1690	5.6	0.7
6-23 months	34	455	7.6	1.4	24	500	5.0	1.1

9.5 Anemia

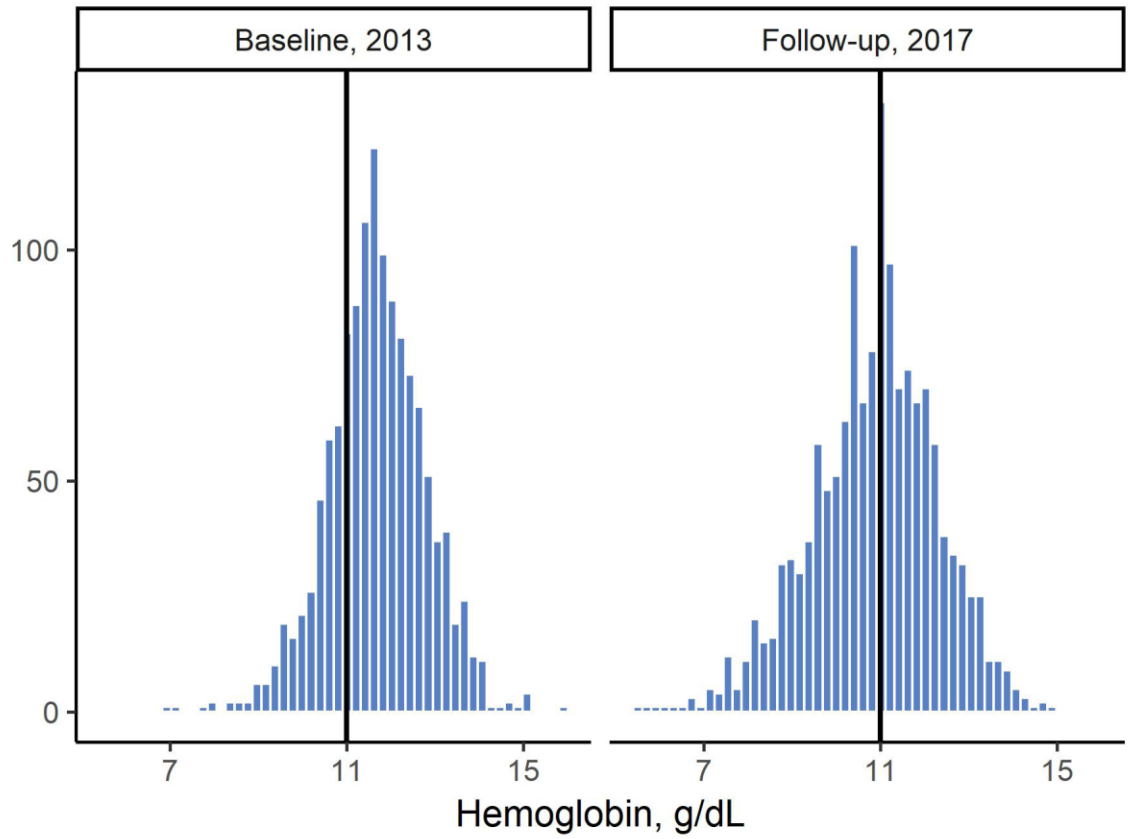
Anemia is a condition characterized by low concentration of hemoglobin in the blood. Hemoglobin is necessary for transporting oxygen to tissues and organs in the body. The reduction in oxygen available to organs and tissues when hemoglobin levels are low is responsible for most of the symptoms experienced by anemic persons. The consequences of anemia include general body weakness, frequent tiredness, and lowered resistance to disease. It is of concern in children because anemia is associated with impaired mental and motor development. Overall, morbidity and mortality risks increase for individuals suffering from anemia.

Common causes of anemia include inadequate intake of iron, folate, vitamin B12, or other nutrients. This form of anemia is commonly referred to as iron-deficiency anemia and is the most widespread form of anemia in the world. Anemia can also be the result of thalassemia, sickle cell disease, malaria, or intestinal worm infestation.

9.5.1 *Distribution of hemoglobin values*

Figure 9.6 shows the distribution of hemoglobin values (in g/dL) among children 0-59 months of age. The vertical black lines in the figure denote a hemoglobin concentration of 11.0 g/dL – children to the left of the line are classified as anemic.

Figure 9.6: Distribution of altitude-adjusted hemoglobin values among children 0-59 months, unweighted



9.5.2 *Prevalence of anemia*

Levels of anemia were classified as severe (<7.0 g/dL) and any (<11.0 g/dL) based on the hemoglobin concentration in the blood. The cutpoints for anemia are adjusted (raised) in settings where altitude is more than 1,000 meters above sea level, to account for lower oxygen partial pressure, a reduction in oxygen saturation of blood, and an increase in red blood cell production. Although some regions of Honduras are mountainous and well above 1,000 meters, the majority of the population resides at lower levels. The highest elevation of a surveyed household at the second follow-up was 1,989 meters above sea level; 24.3% of children (unweighted) lived above 1,000 meters. Correction for elevation was applied to anemia diagnosis where data collectors measured altitude over 1,000m (using a handheld GPS device).

Children whose hemoglobin levels are below 11 g/dL are considered anemic, and children who have hemoglobin levels below 7 g/dL are considered severely anemic. Table 9.4 indicates that 47.8% of children under age 5 in Honduras are anemic. Overall, the anemia prevalence is mostly mild to moderate (47.3%), with only 0.5% of children under 5 years presenting as severely anemic. Anemia prevalence is highest among children aged 0-5 months (81.8%) compared with the other children. More than 62% of all children aged 6-23 months, our targeted population for anemia intervention, were found to be anemic.

Table 9.4: Prevalence of anemia, children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Prevalence of anemia in children 0-59 months, by sex and age								
Male	155	627	25.4	2.3	360	743	49.1	2.6
Female	131	665	19.7	2.0	336	718	46.4	2.6
0-5 months	10	27	37.2	8.0	22	28	81.8	8.5
6-11 months	57	138	41.2	4.9	99	122	81.5	3.9
12-23 months	96	299	32.2	3.2	188	336	55.2	3.5
24-59 months	123	828	15.4	1.7	387	975	39.7	2.1
0-59 months	286	1292	22.5	1.8	696	1461	47.8	1.8
6-23 months	153	437	35.0	3.0	287	458	62.0	3.0
Prevalence of severe anemia in children 0-59 months, by sex and age								
Male	0	627	0.0	0	5	743	0.6	0.4
Female	0	665	0.0	0	4	718	0.4	0.2
0-5 months	0	27	0.0	0	0	28	0.0	0
6-11 months	0	138	0.0	0	1	122	0.8	0.8
12-23 months	0	299	0.0	0	4	336	1.0	0.5
24-59 months	0	828	0.0	0	4	975	0.3	0.2
0-59 months	0	1292	0.0	0	9	1461	0.5	0.2
6-23 months	0	437	0.0	0	5	458	0.9	0.4

APPENDIX A. SAMPLING DESIGN AND METHODOLOGY

A.1 Sample Size

Sample sizes were determined based on IDB's pre-specified plan for the second follow-up measurement to complete a full census of sampled segments (described in section A.2 "Sampling Procedures," below), followed by a survey of 1,714 selected eligible households in intervention areas, and 750 selected eligible households in comparison areas. Households were eligible if they had at least one child aged 0-59 months or one woman aged 15-49 years.

In order to achieve the desired sample size of 1,714 households, we sought to complete interviews with residents of 30 randomly selected households in each of the 56 randomly selected segments in intervention areas (25 in comparison areas). More specifically, we drew a sample of 30 randomly selected households with age-eligible women and/or children as residents, and then drew a backup sample of 10 households from the remaining households with eligible participants in the segment. In some cases, selected households were absent or declined to participate in the SMI-Honduras Household Survey. These households were replaced in order by households from the backup sample for the same segment. In each selected household, all eligible women and children were selected to participate in the study. Informed consent was sought from each respondent to the household questionnaire and women's health interview, and from the guardian of each child participating in physical measurements. Occasionally, one or more eligible participants refused the interview despite other household members participating, or a survey was refused in course, resulting in a partially complete household result. Because multiple interviewers worked the sample simultaneously, in a handful of instances more than 30 surveys were completed. In the second follow-up, counts of complete households by segment range from 28 to 33 households. Twelve segments with fewer than 30 complete households had one or two partially complete households, and two segments with 30 complete households have additional partially complete households. Data from partially complete households are used wherever individual modules are sufficiently complete.

A.2 Sampling Procedures

IDB identified 18 intervention municipalities in which to conduct the SMI household survey for the Initiative on the basis of their high concentration of residents in the country's lowest wealth quintile, and 16 comparison municipalities with similar socioeconomic characteristics and ethnic composition. From these 33 municipalities, a two-stage clustered random sample of eligible households was selected.

In this section, we describe the random sampling procedures for selecting the segments from the target area, and the households within the segment. An alternative sample was also selected in the event that the survey could not be conducted in the selected segments. Below we describe the selection of the primary and alternate samples.

A.2.1 Cluster sampling

Cluster sample sizes were determined based on the total estimated household sample size divided by a fixed cluster size "μ" of 30 households per segment. The primary sample at the second follow-up

of 56 intervention and 25 comparison clusters (segments) was randomly selected from a total of 281 intervention segments in 18 municipalities and 190 comparison segments in 16 municipalities which, based on data from the 2013 Honduras Population Census, contained 52,312 and 57,490 occupied households, respectively. As stated previously, segments were selected in each study arm with probability proportional to size and with replacement, as follows:

Size was represented by the number of occupied households within the segment, based on data from the 2013 Honduras Population Census. We generated a variable for the cumulative number of households in each of the intervention and comparison sampling frames. We divided the cumulative total by the number of segments we meant to sample to obtain an interval length "Δ." A random starting point "Σ" was drawn from a uniform distribution between 1 and the interval length Δ. The n^{th} segment in the sample was the first segment whose cumulative number of households was greater than $\Sigma + (n-1) * \Delta$.

After selecting the 81 total segments to be surveyed, a set of 20 alternate segments in intervention areas and 15 alternate segments in comparison areas were randomly selected with probability proportional to size. These segments could be used in the event that any of the selected segments could not be surveyed and needed to be replaced due to security concerns, community rejection of the study, or a high proportion of absent households. In Honduras in the 2017 follow-up survey, four segments in intervention areas were replaced due to security concerns. Of the two segments requiring replacement in Dulce Nombre de Culmí, Olancho, one was replaced with an alternate segment from the same municipality, and the second was replaced with a randomly selected alternate from intervention areas outside Dulce Nombre de Culmí due to widespread security concerns in Olancho. The two segments requiring replacement in Cabañas, Copán were substituted with randomly selected alternates from other intervention municipalities within Copán department after it was determined that surveying in the alternate segments of Cabañas municipality posed excessive risk. During implementation of the baseline SMI census, no alternate segments were surveyed.

A.2.2 Household sampling

Within each randomly selected cluster, a complete household listing exercise was carried out, enabling the systematic selection of households for participation in the survey, based on household composition. All households in which women aged 15-49 years and/or children aged 0-59 months resided were eligible to be selected for the survey. Eligible households were sorted according to a random variable. The first 25 households with eligible children were selected for participation. The first five households with eligible women only were selected to complete the sample of 30 households. Ten additional households were identified as an alternate sample, eight with eligible children and two with eligible women only. These alternate households were substituted in order for selected households that were absent throughout the data collection or refused participation in the study.

APPENDIX B. SURVEY WEIGHTS, SAMPLING ERROR, AND DESIGN EFFECTS

B.1 Weighting Methodology

Survey weights reflect the three-stage cluster sampling design of the study. The primary sampling unit is referred to as the "segment." The segment is censused, and 30 households with eligible participants selected at random. Within selected households, all women 15-49 years of age and all children 0-59 months of age are selected for participation in the survey. Design weights for households, women and children were generated according to the inverse probability of selection of the unit and incorporated into the merged datasets for analyses. The weights were calculated as follows for households:

$$Weight = \frac{1}{p(selecting\ Household\ Y)} = \frac{1}{p(selecting\ Segment\ X) * p(selecting\ Household\ Y\ in\ segment\ X)}$$

where

$$p(selecting\ Segment\ X) = \frac{\#\ occupied\ households\ in\ Segment\ X\ in\ 2013\ Population\ Census}{Total\ \#\ occupied\ households\ in\ target\ municipalities\ in\ 2013\ Population\ Census} * \#\ draws$$

and the number of draws corresponds to the number of segments in the corresponding study arm (56 for intervention areas and 25 for comparison areas at the second follow-up), and the total number of occupied households in target municipalities in the 2013 Honduras Population Census corresponds to 52,312 in intervention areas and 57,490in comparison areas, and

if the household includes children under 5 according to the SMI-Honduras census:

$$p(selecting\ household\ Y\ in\ segment\ X) = \frac{\#\ households\ with\ age\text{-}eligible\ children\ interviewed\ for\ SMI\ in\ segment\ X}{\#\ occupied\ households\ with\ age\text{-}eligible\ children\ in\ Segment\ X\ from\ SMI\ census}$$

or if the household does not include children under 5 according to the SMI-Honduras census:

$$p(selecting\ household\ Y\ in\ segment\ X) = \frac{\#\ households\ with\ eligible\ women\ but\ no\ eligible\ children\ interviewed\ for\ SMI\ in\ segment\ X}{\#\ occupied\ households\ with\ age\text{-}eligible\ women\ but\ no\ children\ in\ Segment\ X\ from\ SMI\ census}.$$

Minor modifications to this formula were used to calculate weights for women and children as follows:

$$p(selecting\ woman\ Z) = \frac{p(selecting\ Segment\ X) * p(selecting\ Household\ Y\ in\ Segment\ X)}{average\ number\ of\ women\ 15\text{-}49\ years\ old\ per\ household\ in\ SMI\ census} * p(selecting\ Woman\ Z\ in\ household\ Y)$$

where the average number of women 15-49 years old per household in the sample was 1.078576 in intervention areas and 1.114975 in comparison areas (according to the SMI-Honduras Household Census), and

if the household includes children under 5 according to the SMI-Honduras census:

$$p(\text{selecting Household } Y \text{ in Segment } X) = \frac{\#\ \text{households with eligible children completing women's health survey for SMI in Segment } X}{\#\ \text{occupied households with age-eligible children in Segment } X \text{ from SMI census}},$$

or if the household does not include children under 5 according to the SMI-Honduras census:

$$p(\text{selecting Household } Y \text{ in Segment } X) = \frac{\#\ \text{households with eligible women but not children completing women's health survey for SMI in Segment } X}{\#\ \text{occupied households with age-eligible women but not children in Segment } X \text{ from SMI census}},$$

and

$$p(\text{selecting Woman } Z \text{ in Household } Y) = \frac{\#\ \text{women in Household } Y \text{ completing the survey}}{\#\ \text{women 15-49 years old residing in Household } Y \text{ from SMI census}},$$

and

$$p(\text{selecting Child } W) = \frac{p(\text{selecting Segment } X) * p(\text{selecting Household } Y \text{ in Segment } X)}{\text{average number of children 0-59 months old per household in sample}} * p(\text{selecting child } W \text{ in Household } Y)$$

where the average number of children 0-59 months old per household in the sample was 0.47444 in intervention areas and 0.4484817 in comparison areas (according to the SMI-Honduras Household Census), and

$$p(\text{selecting Household } Y \text{ in Segment } X) = \frac{\#\ \text{households completing children's health survey for SMI in Segment } X}{\#\ \text{occupied households with age-eligible children in Segment } X \text{ from SMI census}},$$

and

$$p(\text{selecting Child } W \text{ in Household } Y) = \frac{\#\ \text{children in Household } Y \text{ completing the survey}}{\#\ \text{children 0-59 months residing in Household } Y \text{ from SMI census}}.$$

The weights yielded results which were similar to the unweighted results.

B.2 Sampling Errors

As described in Appendix A, a random sample of eligible households was selected from each of 56 clusters (segments) in intervention areas and 25 clusters in comparison areas which had been randomly sampled with probability proportional to size from the target intervention and comparison areas of the initiative. Although cluster sampling can improve efficiency when the target population is spread out over a large area, the resultant sample consists of observations that are not completely independent of one another. The standard errors presented throughout this report and in Appendix C account for this intra-class correlation, using Taylor-linearized variance estimation.

APPENDIX C. SMI HOUSEHOLD INDICATORS

Table C.1: Performance of payment indicators, SMI-Honduras Second Follow-up Survey

		Baseline 2013				Second Follow-Up 2017			
	Indicator	n	N	%	SE	n	N	%	SE
4010	Women (age 15-49) delivered in CMI/hospital with skilled attendant in their most recent pregnancy in the last two years	462	666	68.6	3.8	608	709	84.7	2.8
4030	Women (age 15-49) who received postpartum care within 7 days with skilled personnel in their most recent pregnancy in the last two years	319	662	47.0	3.3	424	710	60.4	3.5
NA	Children (6-23 months) consumed at least 50 doses of micronutrients in the last 6 months	1	477	0.1	0.1	153	496	29.5	3.0

Table C.2: Performance of monitoring indicators, SMI-Honduras Follow-up Survey

		Baseline 2013				Second Follow-Up 2017			
	Indicator	n	N	%	SE	n	N	%	SE
2010	Women (age 15-49) currently using (or whose partner is using) a modern method of family planning	685	969	69.3	3.2	902	1198	75.4	2.6
1080	Women aged 15-49 with a live birth in the last year	290	1847	10.2	0.8	247	2124	7.0	0.6
1090	Women aged 15-19 with a live birth in the last year	63	388	10.7	1.5	52	408	7.4	1.2
2020	Women (age 15-49) who did not wish to become pregnant and who were not using/not have access to family planning methods (temporary and permanent)	284	969	30.7	3.2	296	1198	24.6	2.6
2030	Women (age 15-49) who report having stopped using a method of family planning during the previous year	19	762	2.1	0.6	29	941	2.3	0.8
4110	Women (age 15-49) with a birth in the last two years who can recognize at least 5 danger signs in newborns	111	584	20.5	2.4	186	600	33.6	3.7
6010	Women 15-49 who report having any illness in the past two weeks	403	1847	24.3	2.0	324	2122	17.5	1.5
6020	Women (age 15-49) who report having any illness in the past two weeks but did not seek health care	267	403	68.5	3.6	212	324	61.9	4.9
6130	Women who reported satisfaction with health care services at their most recent visit to a health facility	958	995	96.5	0.8	1306	1366	96.3	0.7
6140	Women who reported satisfaction with cleanliness of the facility at their most recent visit to a health facility	646	998	64.4	2.8	980	1364	75.2	2.3
6150	Women who reported satisfaction with competence of the medical personnel at their most recent visit to a health facility	963	984	98.2	0.6	1310	1362	97.3	0.6
6160	Women who reported they were treated with respect at their most recent visit to a health facility	678	1002	71.3	2.2	957	1368	73.5	2.7
3010	Women (age 15-49) who received at least one antenatal care visit by skilled personnel in their most recent pregnancy in the last two years	543	666	80.9	2.8	664	710	92.9	2.0
3020	Women (age 15-49) who received at least four antenatal care visits by skilled personnel in their most recent pregnancy in the last two years	444	660	65.2	3.4	596	696	84.4	2.5
4020	Women (age 15-49) who received postpartum care by skilled personnel within the first 48 hours in their most recent pregnancy in the last two years	275	662	40.9	3.2	249	710	36.3	3.5
4035	Women (age 15-49) who received postpartum care by skilled personnel between 7 and 42 days after delivery in their most recent pregnancy in the last two years	113	662	15.3	2.0	231	710	32.6	3.9

(continued)

		Baseline 2013				Second Follow-Up 2017			
	Indicator	n	N	%	SE	n	N	%	SE
4040	Women (age 15-49) who received postpartum care by skilled personnel within 24 hours after delivery, a second check before 7 days, and a third check between 7 and 42 days after delivery in their most recent pregnancy in the last two years	8	662	0.9	0.4	21	710	3.0	0.8
4100	Infants receiving neonatal care by skilled personnel in a health facility within 48 hours of birth in the last two years	279	630	43.2	3.3	183	636	29.0	4.2
4101	Infants receiving neonatal care by skilled personnel in a health facility within 24 hours of birth in the last two years	221	630	34.5	2.7	124	636	19.7	3.7
5050	Children born in the last two years who were breastfed within one hour after birth	519	701	73.1	2.4	602	714	85.0	1.9
5060	Children 0-59 months who received ORS and zinc in the last episode of diarrhea in the past two weeks	0	77	0.0	-	4	49	8.3	4.1
4145	Children (0-59 months) with pneumonia symptoms who received antibiotics	80	138	54.8	6.8	66	126	51.5	6.1
NA	Children (0-59 months) fully vaccinated for age, according to vaccine card and recall	613	1495	41.1	1.9	1148	1655	68.5	2.2
5010	Children 12-59 months who received 2 doses of deworming in the last year	483	1235	39.5	2.4	363	1379	26.8	1.6
5040	Children 0-5 months who were exclusively breastfed on the previous day	80	152	54.8	4.4	74	145	51.8	5.4
5075	Children 6-23 months who consumed at least 60 packets of micronutrients (complete dose) in the last 6 months	0	478	0.0	-	133	496	25.8	2.9
5080	Children 12-15 months who were breastfed on the previous day	98	118	82.4	3.5	104	133	78.2	3.9
5090	Children 6-8 months who received solid or semi-solid food on the previous day	67	76	87.0	4.2	50	57	88.1	4.9
5100	Children 6-23 months who received foods from 4 or more food groups during the previous day	199	481	39.4	2.8	287	507	56.6	3.9
5110	Children 6-23 months breastfed or complimentary feeding who received solid, semi-solid, or soft foods the minimum number of times or more during the previous day	296	474	61.6	3.1	327	498	65.2	3.0
5120	Children 6-23 months who received the minimum acceptable diet (apart from breastmilk) during the previous day	129	480	25.8	2.7	189	504	37.0	3.4
5130	Children 6-23 months who received iron-rich or iron-fortified foods during the previous day	227	481	43.7	3.5	300	507	58.7	3.5
6030	Children (0-59 months) who had any illness in the past two weeks, according to report of mother or caregiver	532	1596	33.9	1.8	485	1720	28.8	1.7
6040	Children (0-59 months) who had any illness in the past two weeks but did not seek health care, according to report of mother or caregiver	4	521	0.8	0.5	3	482	0.6	0.4
1060	Children 6-23 months with hemoglobin <110g/L	153	437	35.0	3.0	287	458	62.0	3.0
1070	Children 0-59 months with height < -2 SD of the mean of the reference population for age	324	1480	23.6	2.6	370	1692	23.2	2.3

		Baseline 2013			Second Follow-Up 2017		
	Indicator	N	mean	SE	N	mean	SE
6090	Average out-of-pocket household itemized health expenditure for the last month (L)	1496	192.7	44.1	1679	183.5	43.4
6100	Average household itemized expenditure for the last month (L)	1524	3276.6	168.0	1681	4093.7	214.6
6080	Average travel time to nearest health facility (min)	1772	55.8	7.1	2042	57.7	8.4
6085	Average distance to nearest health facility (km)	468	4.6	0.9	1319	6.3	1.5
6120	Average wait time at most recent visit to a health facility (min)	976	79.8	6.7	1298	94.9	6.9
6082	Average travel time to delivery location for most recent birth in the last two years (min)	479	148.6	13.4	615	145.1	10.4

APPDENDIX D. COMPARISON AREAS

D1. CHAPTER 1

D1.1 Report structure

The chapters in the main body of the report present characteristics of the surveyed SMI-Honduras sample in intervention areas only. Each table is presented for comparison areas only in Appendix D, and pooled intervention and comparison areas in Appendix E. Most tables take one of three types. Tabulations of select-only-one question types are mutually exclusive, so the proportions sum to 100%. Counts are shown for non-response ("Don't know" or "Decline to respond" recorded), but these cases are always excluded from the denominator.

Tabulations of select-all-that-apply question types do not have mutually-exclusive categories, as respondents can report more than one option, and thus proportions do not sum to 100%. The table shows affirmative cases (n) and non-missing cases (N). Non-response is the difference between non-missing cases (N) and the total sample eligible for that section of the questionnaire, indicated at the start of the chapter. Where statistics are reported for subpopulations, the size of the subpopulation is reported in the same table or the preceding table for straightforward comparison.

Tabulations of continuous variables, where respondents were requested to provide a numeric response, present the range and quartiles (25th percentile, median, 75th percentile) in order to illustrate the distribution of responses across the sample. Counts of non-response are listed in the table and excluded from the count of non-missing cases (N).

D2. CHAPTER 2: CHARACTERISTICS OF HOUSEHOLDS

This chapter provides a descriptive summary of the basic demographic, socioeconomic, and environmental characteristics of the households sampled for the SMI-Honduras Baseline and Second Follow-up Household Survey.

D2.1 Characteristics of Participating Households

A total of 756 households in the Honduras second follow-up completed the household characteristics questionnaire. In the baseline, 1,445 completed the survey. The remainder of this chapter is dedicated to a summary of the basic demographic, socioeconomic, and environmental characteristics of the households completing the household characteristics questionnaire.

D2.2 Age and Sex Composition, SMI Census

The unweighted distribution of the de facto household population in the surveyed households in the SMI-Honduras household census by five-year age groups and by sex is shown for baseline (Figure D2.1) and second follow-up (Figure D2.2). Honduras has a larger proportion of its population in the younger age groups than in the older age groups. Figure D2.2 indicates that in the second follow-up, just under 34% of the population in the Second Follow-up is under age 15 years, more than half (61%) of the population is in the economically productive age range (15-64), and the remaining 6% is age 65 and above.

Figure D2.1: Age and sex of census sample, unweighted percent distribution of de facto household population by five-year age groups, baseline survey

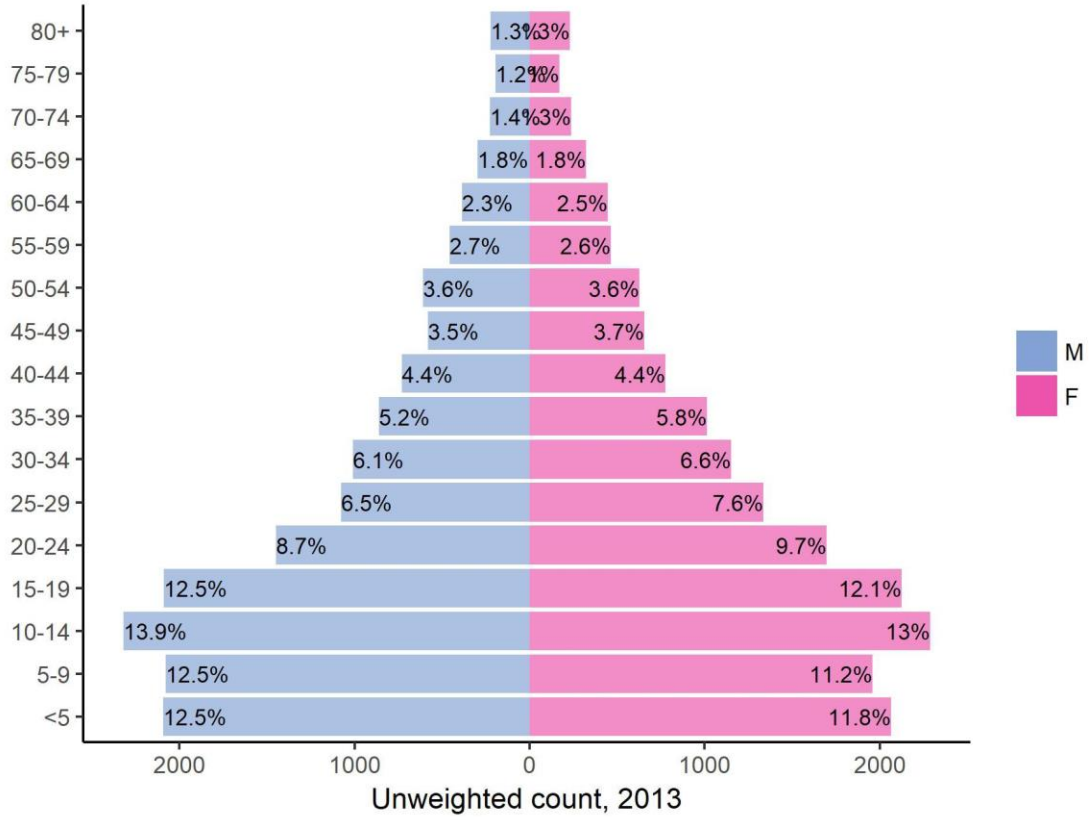
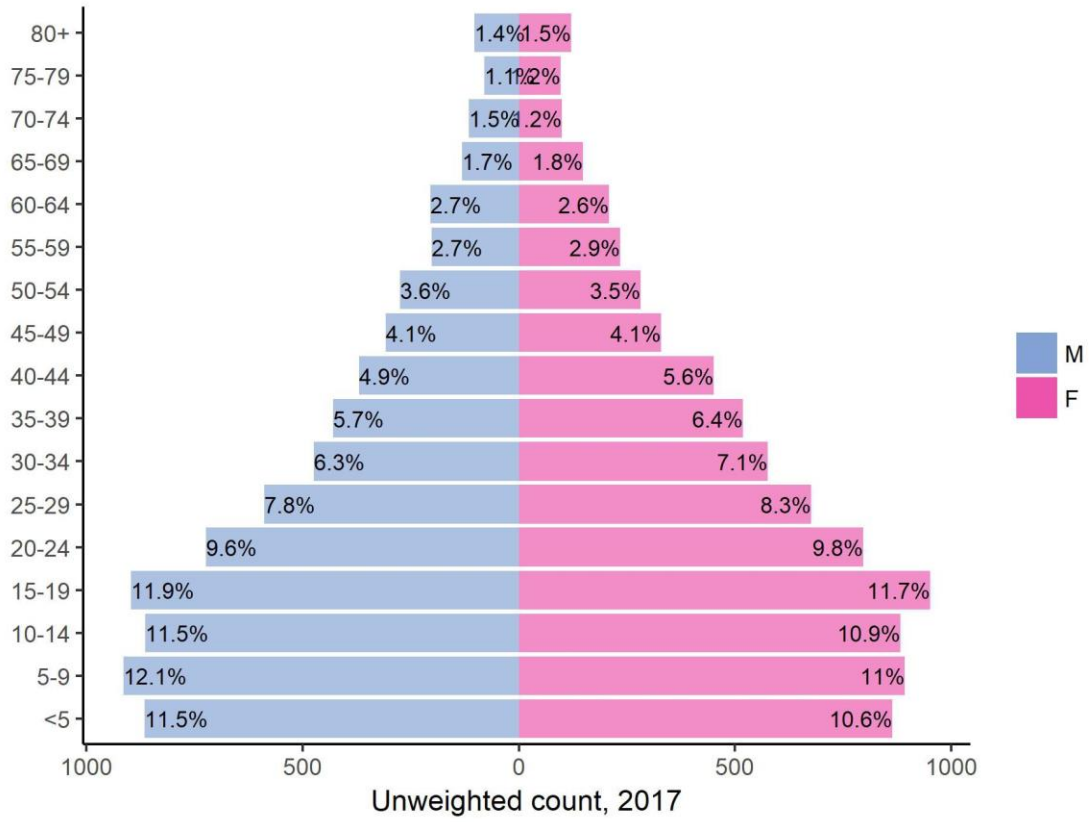


Figure D2.2: Age and sex of census sample, unweighted percent distribution of de facto household population by five-year age groups, follow-up survey



D2.3 Household Characteristics, SMI Household Survey

The number of households, women and children in the sample are displayed in Table D2.1; and the percent distribution of households by head of household, number of usual members, and marital status are shown in Table D2.2.

Seventy three percent of households in Honduras identify as dual-headed in the second follow-up. Males are the head of the household in 4.5% of surveyed households in Honduras, with females as the head of household in the remaining 22.4%. The median household size in Honduras is five members, with another 15% of households having six or more members.

Table D2.1: SMI household survey sample sizes: number of total households, women 15-49 years of age, and children 0-59 months

	Baseline 2013	Second Follow-Up 2017
Households	1445	756
Women	1712	975
Children	1521	770

Table D2.2: Household characteristics, SMI household sample

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Head of household						
Dual-headed household	1101	77.0	1.7	559	73.2	2.0
Single head, female	293	19.7	1.5	167	22.4	1.9
Single head, male	51	3.3	0.4	30	4.5	1.0

Dual-headed households are those where (a) two individuals were identified as "head" by the respondent or (b) both the person identified as "head" and his or her spouse or partner are household members

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Number of usual household members	1445	0	1	4	5	6	16
Second follow-up 2017							
Number of usual household members	756	0	1	4	5	6	15

D2.4 Drinking Water Access and Treatment

D2.4.1 Sanitation facilities and waste disposal

A household's source of drinking water is an important determinant of the health status of household members. Contaminated drinking water can spread waterborne diseases, such as diarrhea or dysentery. Piped water, protected wells, and protected springs are expected to be relatively free of these diseases; whereas other sources like unprotected wells, rainwater, or surface water are more likely to carry disease-causing agents.

The percent distribution of households by source of drinking water, location of water source, and information about sanitation facilities is shown in Table D2.3. The majority of surveyed households (67.4%) have water piped to dwelling, and 32.6% of households have to go outside their home or yard to a water source.

Many households (43.6%) use a flush toilet and 37.8% of households use a pour flush toilet. Five percent of households report having no toilet, compared to 12.3% at baseline.

Table D2.3: Household water source and sanitation facilities

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Household water source						
Piped to dwelling	1198	81.6	3.3	503	67.4	4.4
Piped to yard/plot	63	5.0	1.0	179	22.8	4.3
Bottled water	17	1.0	0.4	32	2.8	1.3
Protected dug well	47	3.5	1.1	12	2.2	1.2
Unprotected dug well	27	2.1	0.7	10	1.6	0.7
Surface water	14	1.1	0.4	5	0.9	0.6
Tubewell/borehole	29	2.2	1.2	2	0.3	0.3
Unprotected spring	7	0.4	0.3	2	0.3	0.2
Rainwater collection	0	0.0	-	2	0.3	0.2
Water jug	3	0.2	0.1	3	0.3	0.2
Protected spring	7	0.6	0.2	2	0.2	0.2
Public tap/standpipe	8	0.6	0.3	0	0.0	-
Tanker truck	0	0.0	-	0	0.0	-
Cart with small tank/drum	0	0.0	-	0	0.0	-
Other	25	1.7	0.3	4	0.8	0.5
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-
Time it takes to retrieve water (min)						
Water on premises	1334	91.9	1.9	734	97.1	0.9
Less than 30 minutes	92	7.0	1.7	16	2.7	0.9
30 minutes or longer	14	1.1	0.4	3	0.3	0.3
Don't know	4	-	-	3	-	-
Decline to respond	1	-	-	0	-	-
Sanitation facilities						
Flush toilet	541	34.6	3.5	362	43.6	6.2
Pour flush toilet	595	42.8	2.4	277	37.8	4.5
Pit latrine	123	8.6	1.4	71	11.4	2.8
No toilet	163	12.3	1.9	31	5.0	2.0
Dry toilet	12	1.0	0.4	2	0.3	0.2
Other	10	0.7	0.3	12	1.9	0.8
Don't know	0	-	-	0	-	-
Decline to respond	1	-	-	1	-	-

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Shared toilet/facilities	100	1271	8.6	0.9	64	711	8	1.3

D2.4.2 Cooking fuel sources

Cooking fuel source and the location for cooking food are included in Table D2.4. The percentage of households with a separate kitchen is also shown. The two most commonly reported cooking fuel sources used in households during the second follow-up are wood (75.7%) and gas tank (24.9%). Among those

households with non-missing responses as to what cooking fuel sources they use, 66.5% report normally cooking food in the house, 18.5% normally cook food in a separate building, and 15% normally cook food outdoors. Seventy one percent of households have a separate kitchen.

Table D2.4: Cooking fuel source and cooking location

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Wood	1133	1445	79.5	3.1	512	756	75.7	5.6
Gas tank	211	1445	13.1	2.2	249	756	24.9	5.1
Electricity	344	1445	22.7	2.6	79	756	9.7	1.9
Straw/twigs/grass	1	1445	0.1	0.1	4	756	0.6	0.3
Coal	4	1445	0.3	0.1	1	756	0.2	0.2
Agricultural crops	0	1445	0.0	-	0	756	0.0	-
No food cooked at home	1	1445	0.1	0.1	0	756	0.0	-
Other	0	1445	0.0	-	1	756	0.1	0.1

*categories not mutually exclusive (select all that apply)

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Location for cooking food, if cooking fuel source reported						
Inside house	985	68.3	2.5	526	66.5	3.3
In a separate building	204	14.6	1.9	119	18.5	2.7
Outdoors	253	16.9	2.0	111	15.0	1.4
Other	3	0.2	0.1	0	0.0	-
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Separate kitchen, if cooking fuel source reported and food cooked in the home	636	984	65.5	2.8	352	526	70.6	4.4

D2.4.3 Household wealth

The median number of bedrooms per household is less than two (Table D2.5). Twelve percent of households in the second follow-up own agricultural land and 11.7% of households rent agricultural land (Table D2.6).

The availability of durable consumer goods is a good indicator of a household's socioeconomic status. Table D2.6 shows the availability of selected consumer goods by household. The large majority of households (84%) have mobile phone, and the most commonly owned items are electricity (83.2%), television (69%), and refrigerator (58%). Many households (36.7%) own a bicycle and 15.5% own a motorcycle/scooter.

Table D2.5: Number of bedrooms per household

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Number of bedrooms	1443	2	0	1	2	2	7
Second follow-up 2017							
Number of bedrooms	756	0	0	1	2	2	6

Table D2.6: Household assets

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Household assets								
Mobile phone	1176	1445	79.7	1.9	654	756	84.0	3.9
Electricity	1246	1445	85.2	3.0	657	756	83.2	6.7
Television	1019	1445	67.9	3.6	569	756	69.0	6.5
Refrigerator	763	1445	50.0	3.5	481	756	58.0	6.1
Radio	712	1445	50.1	2.7	253	756	35.4	4.8
Sound system	593	1445	38.5	2.8	285	756	33.4	3.9
Watch	382	1443	26.1	2.0	204	756	25.8	2.6
Bank account	178	1429	12.1	1.4	178	751	21.9	2.8
Washing machine	54	1445	3.5	0.9	67	756	6.9	1.7
Computer	75	1445	4.8	0.7	64	756	6.8	1.6
Guitar	51	1444	3.5	0.6	26	756	3.8	0.8
Landline phone	22	1443	1.3	0.3	17	756	1.2	0.5
Transportation assets								
Bicycle	507	1443	33.7	2.6	271	756	36.7	5.2
Motorcycle/scooter	112	1443	7.3	1.0	123	756	15.5	2.3
Car	146	1444	9.2	1.1	99	756	11.3	2.0
Truck	11	1444	0.7	0.2	5	756	0.6	0.3
Animal cart	7	1444	0.5	0.2	0	756	0.0	-
Agricultural assets: Livestock ownership								
Chickens	738	1444	53.7	4.1	368	756	55.7	5.4
Horses, donkeys, or mules	122	1444	9.2	1.8	52	756	9.4	3.3
Pigs	136	1444	10.0	1.8	58	755	8.9	2.6
Cattle	80	1443	6.3	1.3	29	755	4.6	1.3
Sheep or goats	3	1444	0.2	0.1	4	756	0.6	0.3

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Agricultural assets: Own or rent agricultural land						
No agricultural land	1028	68.9	4.2	609	75.5	4.9
Owns agricultural land	242	18.6	3.3	77	12.5	3.7
Rents agricultural land	161	12.0	1.8	68	11.7	2.9
Shared/community-held land	5	0.4	0.2	2	0.3	0.2
Don't know	8	-	-	0	-	-
Decline to respond	1	-	-	0	-	-

D2.5 Household expenditure

D2.5.1 Total expenditures by type

Households are surveyed about the amount of money spent over the last month. After reporting total household expenditures, households are then asked how much was spent on specific categories (e.g., food, housing, education, and medical care) over the last four weeks. Table D2.7 shows the itemized monthly expenditure per person living in the household summarized by expenditure quintile. All data are presented in current Lempira (L). Itemized expenditure information was sufficiently complete to report for 713 households at the second follow-up. The lowest quintile in the study area spent less than 558 L per person over the last month in the second follow-up.

Table D2.8 shows the budget share, defined as the weighted average expenditure on each category across a quintile divided by the weighted average total itemized household expenditure in the same quintile. Table D2.8 shows that the poorest 20% of households in the study area spend 75.5% of their monthly expenditure on food, on average. In comparison, the wealthiest households spend 52.3% on food. The poorest households spent 2.8% of their expenditure on medical care, while the wealthiest spent 11.6%.

Table D2.7: Total itemized per- capita expenditure quintiles, Honduras Lempira

	N	DK/DTR	p20	p40	p60	p80
Baseline 2013						
Per capita monthly household expenditure, current LCU	1324	3	344	558	819	1271
Second follow-up 2017						
Per capita monthly household expenditure, current LCU	713	0	558	848	1206	1824

Table D2.8: Itemized household expenditure by total household budget share

	Bottom quintile	2nd quintile	3rd quintile	4th quintile	Top quintile
Baseline 2013					
Food	78.7	77.8	73.5	69.6	58.0
Alcoholic beverages and tobacco	0.6	0.8	0.8	0.4	0.7
Education expenses	5.4	4.0	3.4	3.4	2.5
Furniture and domestic appliances	0.4	0.4	0.2	0.8	2.0
Recreation	0.0	0.0	0.1	0.1	0.1
Housing and utilities	5.6	5.6	6.7	8.3	7.5
Clothing and shoes	2.8	4.3	7.0	7.1	6.5
Transportation	2.6	2.8	3.8	3.9	4.7
Communication	2.1	2.0	2.0	2.1	1.9
Out-of-pocket medical expenses	1.6	2.1	2.5	3.6	12.6
Social security premiums	0.0	0.1	0.0	0.1	0.0
Private insurance premiums	0.0	0.0	0.0	0.1	0.0
Other costs to access health care	0.0	0.1	0.0	0.6	3.4
Second Follow-Up 2017					
Food	75.5	73.6	68.2	57.9	52.3
Alcoholic beverages and tobacco	1.9	0.8	0.2	0.8	0.2
Education expenses	6.4	5.4	4.8	6.2	5.3
Furniture and domestic appliances	0.5	0.1	0.9	1.7	3.1
Recreation	0.0	0.1	0.1	0.5	1.1
Housing and utilities	7.1	9.0	9.8	12.1	11.3
Clothing and shoes	1.6	3.6	5.0	8.0	5.4
Transportation	2.6	3.0	4.2	4.6	6.7
Communication	1.5	2.3	2.2	2.5	2.5
Out-of-pocket medical expenses	2.8	2.2	4.6	5.4	11.6
Social security premiums	0.0	0.0	0.2	0.3	0.2
Private insurance premiums	0.0	0.0	0.0	0.0	0.1
Other costs to access health care	0.0	0.0	0.0	0.0	0.2

D2.5.2 Health expenditures

Of the 713 households with expenditure data at the second follow-up, 239 reported having health expenditures in the last four weeks. Table D2.9 shows health expenditure by type among households reporting non-zero out-of-pocket health expenditure. Very few households had spending in each category.

Table D2.9: Out-of-pocket medical expenditures by type, last four weeks, Honduras Lempira

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Care that required overnight stay in hospital/clinic	299	1	0	0	0	0	30000
Medications prescribed by health personnel	298	2	0	0	0	400	27000
Care by health professionals not requiring overnight stay	298	2	0	0	0	0	15000
Other costs associated with overnight stay in hospital/clinic	299	1	0	0	0	0	10000
Care or non-prescription medications from pharmacist	298	2	0	0	0	0	9000
Dentists	299	1	0	0	0	0	4000
Diagnostic and laboratory tests, X-rays, blood tests	297	3	0	0	0	0	3500
Other health care products or services	298	2	0	0	0	0	1000
Care by traditional/alternative healers/birth attendants	299	1	0	0	0	0	300
Health products (glasses, hearing aids, prosthetics, etc.)	299	1	0	0	0	0	150
Second Follow-Up 2017							
Care that required overnight stay in hospital/clinic	239	1	0	0	0	0	7000
Medications prescribed by health personnel	239	1	0	0	200	800	6200
Care by health professionals not requiring overnight stay	240	0	0	0	0	0	50000
Other costs associated with overnight stay in hospital/clinic	240	0	0	0	0	0	16000
Care or non-prescription medications from pharmacist	240	0	0	0	0	100	4000
Dentists	239	1	0	0	0	0	7000
Diagnostic and laboratory tests, X-rays, blood tests	240	0	0	0	0	0	10000
Other health care products or services	240	0	0	0	0	0	500
Care by traditional/alternative healers/birth attendants	240	0	0	0	0	0	3500
Health products (glasses, hearing aids, prosthetics, etc.)	240	0	0	0	0	0	2500

D2.5.3 Source of health expenditure financing

Of the 713 households with expenditure data at the second follow-up, 84 reported that members of the household went to a hospital and stayed overnight at least once during the last 12 months and paid for expenses associated with the overnight stays. The maximum paid for a hospital stay was 7000 L.

Table D2.10 shows the source and amount of financing for medical expenditures for overnight hospital stays. No single funding source was used by more than about 25% of households with hospital stays.

Table D2.10: Health care financing by source, last 12 months, Honduras Lempira

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Remittances from family or friends abroad	176	0	0	0	0	0	110000
Money from relatives or friends outside the household	176	0	0	0	0	0	1e+05
Items sold	176	0	0	0	0	0	75000
Any household member's current income	174	2	0	0	0	1093.6	70000
Savings	175	1	0	0	0	200	42000
Conditional cash transfer programs	176	0	0	0	0	0	33000
Loan from a source other than family or friends	176	0	0	0	0	0	20000
Reducing other household spending	173	3	0	0	0	0	5000
Property sold	176	0	0	0	0	0	2300
Other source	176	0	0	0	0	0	1500
Political donations or grants	176	0	0	0	0	0	500
Health insurance plan payment/reimbursement	176	0	0	0	0	0	0
Social security payments	176	0	0	0	0	0	0
Second Follow-Up 2017							
Remittances from family or friends abroad	84	3	0	0	0	0	17000
Money from relatives or friends outside the household	84	3	0	0	0	91	50000
Items sold	84	3	0	0	0	0	62000
Any household member's current income	84	3	0	0	0	252.5	32000
Savings	84	3	0	0	0	1000	20000
Conditional cash transfer programs	84	3	0	0	0	0	0
Loan from a source other than family or friends	85	2	0	0	0	941.6	49000
Reducing other household spending	84	3	0	0	0	0	2000
Property sold	84	3	0	0	0	0	50000
Other source	84	3	0	0	0	0	8000
Political donations or grants	84	3	0	0	0	0	2000
Health insurance plan payment/reimbursement	84	3	0	0	0	0	3000
Social security payments	84	3	0	0	0	0	3000

D3. CHAPTER 3: GENERAL CHARACTERISTICS OF RESPONDENTS

This chapter summarizes the demographic characteristics, socioeconomic status, and health status of women of reproductive age (15-49 years) participating in the SMI-Honduras second follow-up household survey.

D3.1 Demographic Characteristics

D3.1.1 Age, marital status, relation to head of household

The age distribution of the de facto population of women of reproductive age participating in the women's health or pregnancy interviews in Honduras is shown in Figure D3.1 by five-year age groups. About 60% of all women participating in the second follow-up SMI-Honduras household survey were younger than 30 years of age, 28% were between the ages of 30 and 39, and 12% were between the ages of 40 and 49. While 22% of women reported being married and 46% being partnered, 30% indicated they were never married. Twenty three percent of women were reported at the SMI-Honduras census to be the head of household, 28% to be the spouse of the head of the household, and 25.2% to be the biological child of the head of the household.

Figure D3.1: Age of respondents, unweighted

One woman who participated in the baseline interview was excluded because she was unable to provide her age or an estimate of her age.

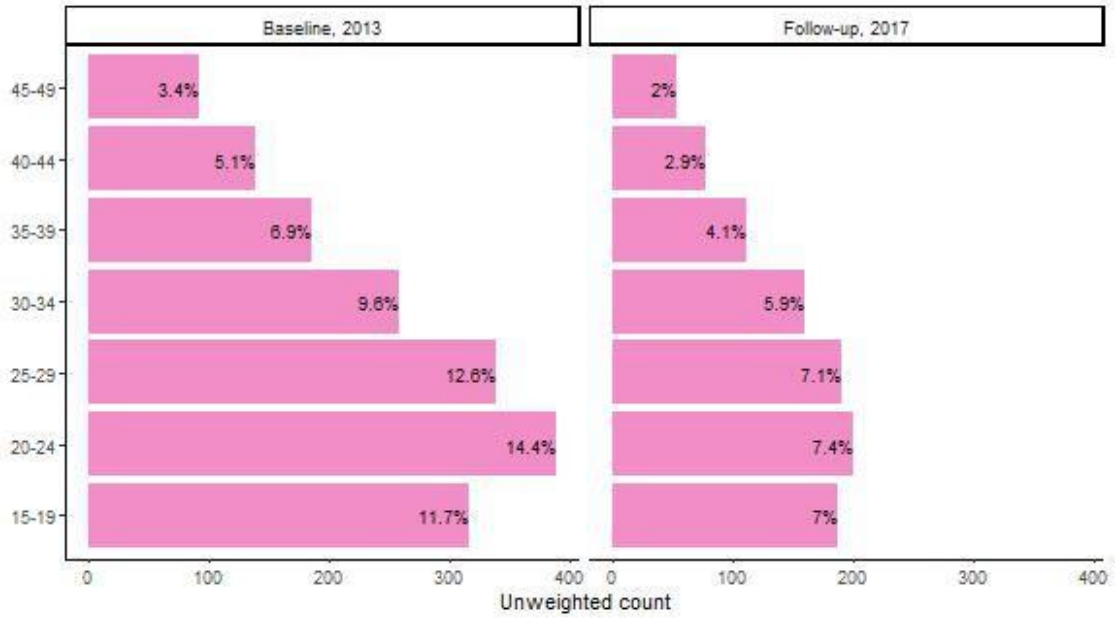


Table D3.1: Demographic characteristics of respondents

	Baseline 2013		Second Follow-Up 2017	
	n	%	n	%
Marital status				
Single	557	32.5	305	31.3
Married	444	25.9	213	21.8
Civil union/partnered	659	38.5	432	44.3
Divorced	4	0.2	0	0.0
Separated	31	1.8	20	2.1
Widowed	17	1.0	5	0.5
Other	0	0.0	0	0.0
Don't know	0	0.0	0	0.0
Decline to respond	0	0.0	0	0.0
Respondent's relationship to head of household				
Head of household	183	10.7	227	23.3
Spouse	421	24.6	273	28.0
Biological child	449	26.2	246	25.2
Adopted or stepchild	9	0.5	11	1.1
Grandchild	42	2.5	24	2.5
Niece/nephew	10	0.6	7	0.7
Parent	2	0.1	0	0.0
Sibling	19	1.1	14	1.4
Daughter-in-law/son-in-law	88	5.1	48	4.9
Sister-in-law/brother-in-law	10	0.6	3	0.3
Grandparent	0	0.0	0	0.0
Mother-in-law/father-in-law	3	0.2	0	0.0
Other relative	7	0.4	6	0.6
Unrelated person	17	1.0	10	1.0
Partner	448	26.2	102	10.5
-	1	0.1	3	0.3
Other	3	0.2	1	0.1
Don't know	0	0.0	0	0.0
Decline to respond	0	0.0	0	0.0

*At baseline, marital status is reported by the respondent in the Census. In the second follow-up, marital status is reported by the woman at the start of the Household Survey
* "-" represents women who were missed in the census and added individually into the household survey, so relationship to the head of household was not registered.

D3.2 Education Attainment and Literacy

Ninety four percent of second follow-up survey participants had some formal education (Table D3.2). For 60.3% of these women, the highest level of education completed was primary schooling. Literacy was assessed by asking respondents to read from a card the following sentence: "La salud del niño es muy importante para su desarrollo en la vida." Eighty five percent of women surveyed were able to read the whole sentence. Six percent of women could not read the sentence at all.

Table D3.2: Education attainment and literacy

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Ever attended school	1573	1690	92.3	1.2	917	975	94.5	1.5
Attended literacy course	217	1690	12.5	2.1	99	970	9.4	2.4

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Educational attainment and literacy						
Primary	1078	69.8	2.6	524	60.3	3.8
Secondary	231	14.6	1.5	200	20.8	2.4
High school	233	13.1	1.5	156	14.5	2.2
University	31	2.5	0.7	37	4.5	1.7
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-
Literacy						
Can read entire sentence	1103	61.9	2.3	820	84.9	2.7
Can read parts	390	24.0	2.1	86	9.2	1.8
Cannot read at all	181	13.9	1.9	68	5.9	1.3
Visually impaired	4	0.2	0.1	1	0.1	0.1
Don't know	9	-	-	0	-	-
Decline to respond	3	-	-	0	-	-

D3.3 Employment

As summarized in Table D3.3, the vast majority of respondents in the second follow-up were homemakers (68.7%). Of the 145 women who reported being employed and working at the time of the interview, most (91.8%) identified "Employee" as their occupational role.

Table D3.3: Employment

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Employment status						
Homemaker	1344	77.6	2.4	687	68.7	4.1
Employed/paid for work	186	11.5	1.7	145	13.2	2.4
Student	112	7.9	1.2	81	10.5	1.5
Self-employed	0	0.0	-	47	5.3	1.3
Employed by a family member without pay	29	1.8	0.6	7	1.7	0.7
Employed, but did not work in last week	6	0.2	0.1	2	0.5	0.5
Unable to work due to disability	5	0.7	0.4	1	0.1	0.1
Retired	2	0.3	0.3	1	0.0	-
Don't know	6	-	-	3	-	-
Decline to respond	0	-	-	1	-	-
Occupational role, among women employed and being paid for work						
Employee	151	78.7	5.4	136	91.8	3.7
Independent contractor	22	11.6	3.7	4	4.2	3.5
Proprietor	10	5.9	2.3	4	3.6	2.6
Employer	3	3.8	3.3	1	0.5	0.5
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-

* Self-employed option was not included in the baseline survey

D3.4 Exposure to Mass Media

Respondents were asked about their exposure to newspapers, radio, and television. As displayed in Table D3.4, among women who demonstrated full or partial literacy in the second follow-up, 28.6% had weekly exposure to newspapers. Forty six percent of all women had weekly exposure to radio, and 68.7% had weekly exposure to television.

Table D3.4: Exposure to mass media

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Newspapers, among literate women						
Never	516	36.3	2.5	491	50.9	4.6
At least once a week	617	41.6	2.5	238	28.6	4.3
Less than once a week	317	22.2	1.5	172	20.6	2.8
Don't know	6	-	-	4	-	-
Decline to respond	0	-	-	0	-	-
Not applicable	37	-	-	1	-	-
Radio						
At least once a week	983	59.4	2.3	475	46.0	4.7
Never	327	20.9	1.9	352	36.5	3.8
Less than once a week	350	19.6	1.9	146	17.4	2.6
Don't know	4	-	-	2	-	-
Decline to respond	0	-	-	0	-	-
Not applicable	26	-	-	0	-	-
Television						
At least once a week	1131	67.5	3.5	679	68.7	5.1
Never	335	21.2	2.9	210	23.1	5.3
Less than once a week	202	11.3	1.5	86	8.2	1.2
Don't know	2	-	-	0	-	-
Decline to respond	1	-	-	0	-	-
Not applicable	19	-	-	0	-	-

D3.5 Access to Health Services

D3.5.1 Proximity to health care facilities

Table D3.5 - Table 3.7 display the responses to several survey questions that were used to assess access to health care facilities. Respondents were asked to estimate proximity to health care facilities in terms of distance (kilometers) and travel time. Not surprisingly, respondents typically had more difficulty estimating distance to health care facilities. As shown in the tables below, "Don't know" responses to the distance questions were exceedingly common.

Excluding the 291 women who were unable to estimate the distance to the closest health facility in the second follow-up, 75% of women reported living 4 kilometers or less from a health facility (Table D3.5). Three-quarters of the sample indicated that it took less than 30 minutes to reach this facility by the usual means of transportation. One-quarter estimated the travel time from their household to the closest health facility to be 30 minutes or more.

Women were also asked for the travel distance and time to their usual health facility, if they had a usual health facility. Excluding the 274 women who did not know the distance to the facility in the second follow-up, three-quarters of the women reported traveling up to 5 kilometers, and three-quarters of the women could travel to the closest facility in less than 20 minutes (Table D3.6).

Of the 663 women who reported a recent health facility visit for themselves or for family members in the second follow-up, three-quarters traveled less than 3.5 kilometers for care. Twenty-five percent of women traveled 3.5 to 95 kilometers for care. Half of women traveled for less than 15 minutes, and one-quarter spent 30 minutes or more traveling for care. The longest travel time reported for a recent illness was approximately 30 hours.

Table D3.5: Proximity to health care facilities: nearest health facility

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Distance, km	442	1248	0	1	1	3	30
Travel time, min	1629	34	1	10	20	30	1800
Second Follow-Up 2017							
Distance, km	684	291	0	1	1	4	100
Travel time, min	941	3	1	10	15	30	1800

Table D3.6: Proximity to health care facilities: usual health facility

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Distance, km	413	1142	0	1	1	3	100
Travel time, min	1284	6	1	10	15	25	59
Second Follow-Up 2017							
Distance, km	550	274	0	1	1	5	80
Travel time, min	677	2	1	10	15	20	45

Table D3.7: Proximity to health care facilities: health facility for recent illness

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Distance, km	306	605	0	1	1.9	3	100
Travel time, min	888	5	1	10	20	30	1800
Second Follow-Up 2017							
Distance, km	456	201	0	1	1	3.5	95
Travel time, min	639	1	1	10	15	30	1800

D3.6 Health Status

D3.6.1 Current health status

Table D3.8 shows the self-rated current health status of all women participating in the survey. When asked to evaluate their current health status relative to the past year, 45.7% reported that their health was "about the same" in the second follow-up. While 40.2% reported that their health had improved, 14.1% reported worse health on the day of the interview, compared to last year. Eighty four percent could "easily" perform their daily activities (e.g., work, housework, and childcare). About 16% of women reported at least some degree of difficulty performing these tasks that was related to their health status.

Table D3.8: Current health status

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Current health relative to last year						
Better	612	35.9	1.7	377	40.2	2.5
Worse	129	6.7	0.8	175	14.1	2.2
About the same	948	57.4	1.9	422	45.7	2.5
Don't know	1	-	-	1	-	-
Decline to respond	0	-	-	0	-	-
Ability to perform daily activities						
Easily	1495	88.6	1.5	817	83.8	2.1
With some difficulty	172	10.0	1.5	140	14.3	2.0
With much difficulty	21	1.4	0.4	18	1.9	0.6
Unable to do	2	0.1	0.1	0	0.0	-
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Days in the last month that physical health was not good						
No days	1345	79.1	1.9	520	54.2	2.8
1 to 3 days	117	6.9	0.9	166	15.7	1.7
4 to 7 days	216	14.1	1.7	286	30.1	2.4
7 to 29 days	0	0.0	-	0	0.0	-
All month	0	0.0	-	0	0.0	-
Don't know	8	-	-	3	-	-
Decline to respond	4	-	-	0	-	-
Days in the last month that mental health was not good						
No days	1468	86.4	1.5	683	73.2	2.8
1 to 3 days	90	5.5	1.0	117	10.9	1.2
4 to 7 days	122	8.1	1.3	171	15.9	2.2
7 to 29 days	0	0.0	-	0	0.0	-
All month	0	0.0	-	0	0.0	-
Don't know	9	-	-	4	-	-
Decline to respond	1	-	-	0	-	-

D3.6.2 Recent illness

Women were asked a series of questions about any illnesses or health problems they had in the two weeks preceding the interview. Out of the women in the second follow-up, 27.5% reported being sick during that time (Table D3.9). Of the 257 women who reported a recent illness, headache (14.8%), cough (13.1%), fever (7.3), and abdominal pain (5.1%) were the most commonly elicited specific complaints. Forty two percent of women specified a different health problem not listed in the questionnaire.

Table D3.9: Recent illness (in the last two weeks)

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Respondent was sick during the past two weeks	413	1688	24.4	1.8	257	973	27.5	2.7

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Type of illness, among those sick in the past two weeks						
Headache	96	25.2	2.8	49	14.8	2.6
Cough	60	10.9	2.2	27	13.1	3.5
Fever	67	14.2	2.3	21	7.3	1.9
Abdominal pain	49	10.4	2.0	17	5.1	1.3
Gynecologic problem	8	3.4	1.6	9	3.9	1.7
Hypertension	6	1.4	0.6	6	3.6	2.2
Swelling in legs, ankles, or feet	0	0.0	-	6	3.0	1.7
Asthma	3	0.4	0.2	2	2.0	1.6
Diarrhea without blood	2	0.3	0.3	1	1.7	1.7
Obstetric problem	2	0.3	0.2	1	1.7	1.6
Eye/ear infection	1	0.9	0.9	3	1.0	0.5
Skin rash/infection	3	0.9	0.6	4	0.8	0.5
Toothache	9	1.5	0.6	2	0.5	0.4
Malaria	0	0.0	-	0	0.0	-
Tuberculosis	0	0.0	-	0	0.0	-
Bronchitis	1	1.5	1.5	0	0.0	-
Pneumonia	0	0.0	-	0	0.0	-
Diarrhea with blood	0	0.0	-	0	0.0	-
Diarrhea with vomiting	0	0.0	-	0	0.0	-
Vomiting	0	0.0	-	0	0.0	-
Anemia	1	0.1	0.1	0	0.0	-
Measles	0	0.0	-	0	0.0	-
Jaundice	0	0.0	-	0	0.0	-
Stroke	0	0.0	-	0	0.0	-
Diabetes	2	1.0	0.9	0	0.0	-
HIV/AIDS	0	0.0	-	0	0.0	-
Paralysis	0	0.0	-	0	0.0	-
Chest infection	0	0.0	-	0	0.0	-
Blood in urine	0	0.0	-	0	0.0	-
Other	102	27.6	3.6	108	41.5	4.0
Don't know	1	-	-	1	-	-
Decline to respond	0	-	-	0	-	-

Options for "Swelling in legs, ankles, or feet", "Blood in urine", and "Chest infection" were available only in the follow-up survey. In the baseline, "Chest infection" was included within the "Cough" answer choice.

D3.6.3 Utilization of health services

Table D3.10 summarizes data regarding the utilization of health services among the 257 women who reported an illness in the two weeks preceding the second follow-up interview. Eighty eight (35.7%) of these women sought care at a health care facility. Many of these women attended a CESAMO health unit (41.7%); another 19.4% attended a CESAR clinic. Only five women were hospitalized for their recent illness (9.9% of those who sought care).

Table D3.10: Utilization of health services for illness in the last two weeks

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Sought care for recent illness	159	413	44.3	3.1	88	257	35.7	4.6
Admitted to hospital for care*	7	46	10.2	4.0	5	26	9.9	4.9

Among women who sought care at a public or private hospital, health center/clinic, mobile clinic, or other health facility; public health unit; private office; or pharmacy

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Type of facility where care was sought						
CESAMO	63	32.1	6.7	44	41.7	9.7
CESAR	42	32.6	8.1	10	19.4	8.5
Private health clinic	14	9.2	3.8	12	18.7	7.5
Public mobile clinic	3	2.5	1.7	3	3.6	3.5
Public hospital	8	4.9	1.8	4	2.1	1.1
Private doctor's office	15	11.7	4.2	4	1.6	1.0
Private mobile clinic	1	0.4	0.4	1	0.8	0.8
Traditional healer	2	1.9	1.6	1	0.8	0.8
CMI	2	0.7	0.6	1	0.8	0.8
Other public health facility	0	0.0	-	1	0.7	0.7
Pharmacy	3	1.7	1.1	1	0.6	0.6
Private hospital	1	0.5	0.5	0	0.0	-
Other private health facility	1	0.4	0.5	0	0.0	-
Community health worker	1	0.2	0.2	0	0.0	-
Other	3	1.0	0.6	6	9.1	5.0
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-

* Women who attended care at a CESAMO or CESAR were not asked about hospitalization.

D3.6.4 Insurance coverage

Less than 4% of women reported being covered by any type of health insurance in the second follow-up (Table D3.11).

Table D3.11: Insurance coverage

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
No insurance	1655	98.4	0.5	930	96.4	1.2
IHSS	20	0.7	0.2	39	2.9	1.0
Private insurance	8	0.8	0.4	4	0.2	0.1
Armed forces	0	0.0	-	0	0.0	-
Other	4	0.1	0.1	2	0.5	0.5
Don't know	1	-	-	0	-	-
Decline to respond	2	-	-	0	-	-

D3.6.5 Other barriers to health care access

There are many other barriers to accessing health care. Women who reported that they sometimes or never sought care when they felt sick were asked what reasons prevented them from receiving health care when it was needed. Interviewers were instructed to ask in an open-ended manner for all applicable reasons, and to mark the appropriate response options in the questionnaire based on the woman's response. Table D3.12 summarizes the responses to this section. The most commonly cited factors influencing health care access in the second follow-up were the preference for treatment at home (43.4%) and the belief that the health center does not have sufficient medicines (16.5%). Eight percent of women did not believe they were ill enough to seek treatment. Access and quality of care were also important barriers: 7.6% of women said the health center was too far away, 5.5% said care was too expensive, and 1.4% said the health center personnel were too difficult to deal with.

Table D3.12: Other barriers to health care utilization, women 15-49 years of age who were sick in the last two weeks but did not seek care

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Treated self at home	164	252	60.3	5.5	52	163	43.4	7.4
Health center does not have sufficient medicines	14	252	4.7	1.5	29	163	16.5	4.1
Too busy with work, children, or other commitments	11	252	3.5	1.5	24	163	14.5	4.0
Not sick enough to seek treatment	55	252	23.9	4.2	11	163	7.8	4.2
Health center is too far away	4	252	1.2	0.6	8	163	7.6	4.1
Care is too expensive	11	252	4.7	1.7	12	163	5.5	2.2
Tried, but no staff was at the center	5	252	2.4	1.5	2	163	3.1	2.5
Could not find transportation	1	252	0.2	0.2	2	163	3.0	2.5
Could not afford transportation	4	252	0.9	0.5	3	163	1.7	1.2
It is difficult to deal with health center personnel	2	252	1.5	1.3	5	163	1.4	0.7
Health center infrastructure is poor	1	252	2.4	2.4	4	163	0.8	0.6
Health center is not well-equipped	3	252	1.1	0.6	2	163	0.8	0.6
Health center personnel not knowledgeable	2	252	0.4	0.3	2	163	0.4	0.4
Tried, but was refused care	0	252	0.0	-	1	163	0.4	0.4
Did not want to go alone	0	252	0.0	-	2	163	0.1	0.1
Did not know where to go	3	252	0.7	0.4	0	163	0.0	-
Do not trust the personnel	1	252	0.4	0.4	0	163	0.0	-
Was previously mistreated	0	252	0.0	-	0	163	0.0	-
Could not get permission to go to the doctor	1	252	0.6	0.6	0	163	0.0	-
Religious or cultural beliefs	0	252	0.0	-	0	163	0.0	-
Other	15	252	8.1	2.7	43	163	24.8	7.7

*categories not mutually exclusive (select all that apply)

D4. CHAPTER 4: EXPOSURE TO HEALTH SYSTEM INTERVENTIONS

This chapter summarizes the exposure of women to four health system interventions: community health worker interventions, breastfeeding interventions, child nutrition interventions, and child health interventions.

D4.1 Exposure to Community Health Workers

Respondents were asked about their exposure to community health workers. Six percent of women reported meeting with a community health worker in the month preceding the second follow-up interview (Table D4.1). Five percent met only once, and 1.2% met two or more times.

Table D4.1: Exposure to community health workers, women 15-49 years

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Did not meet	1567	93.5	1.3	919	94.2	2.3
One time	81	5.0	1.3	37	4.6	2.2
Two times	14	0.7	0.2	11	1.0	0.4
Three times	4	0.1	0.1	3	0.2	0.2
Four or more times	8	0.6	0.4	0	0.0	-
Don't know	10	-	-	5	-	-
Decline to respond	2	-	-	0	-	-

Referral and advice services provided by community health workers are summarized in Table D4.2. Among women who met with a community health worker in the last month during the second follow-up, family planning methods or counseling was the most common service provided (60.6%). Advice about vaccination for children (41.7%) and child nutrition counseling (31.9%) was also frequently reported.

Table D4.2: Services provided by community health workers, women 15-49 years

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Family planning methods or counseling	58	113	54.7	5.3	29	54	60.6	10.0
Vaccination for children	64	113	52.7	7.4	23	54	41.7	7.8
Child nutrition counseling	53	113	50.6	6.1	17	54	31.9	8.4
Referral for antenatal care	19	113	15.5	5.3	16	54	24.6	4.9
Referral for voluntary HIV/syphilis counseling and testing*	20	113	15.8	5.0	15	54	21.0	6.9
Referral for postnatal care	16	113	11.6	3.6	13	54	14.4	6.8
Referral for in-facility delivery	18	113	13.0	3.9	12	54	13.9	6.2
Information, education, and communication sessions (IEC)	17	113	24.6	7.3	6	54	6.7	2.6

* For the prevention of HIV/syphilis transmission from mother to child

	Second Follow-Up 2017			
	n	N	%	SE
Deworming	18	54	33.9	8.7
Micronutrients	13	54	19.7	5.2
Diarrhea treatment with ORS and zinc	14	54	16.6	6.2
Other	16	54	21.4	9.5

Questions about these topics were not asked at baseline. They were added to the second follow-up survey to track exposure to SMI interventions.

D4.2 Satisfaction with Community Health Workers

Women who met with a community health worker in the month preceding the interview were asked to assess their satisfaction with the following: number of visits, information provided by community health workers, and respectfulness of community health workers. Results are displayed in Table D4.3.

Table D4.3: Satisfaction with community health workers, women 15-49 years of age who met with community health workers in the last month

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Satisfaction with number visits from community health workers						
Very dissatisfied	25	23.2	5.5	4	4.8	3.0
Dissatisfied	7	8.0	3.6	2	5.0	5.2
Satisfied	73	63.6	6.3	41	84.7	6.0
Very satisfied	9	5.2	2.5	5	5.4	2.2
Don't know	0	-	-	3	-	-
Decline to respond	0	-	-	0	-	-
Satisfaction of knowledge and training of community health workers						
Very dissatisfied	28	26.0	5.7	4	4.7	2.9
Dissatisfied	7	6.6	3.4	3	5.6	5.8
Satisfied	64	60.1	6.1	41	84.5	7.3
Very satisfied	12	7.3	3.0	5	5.2	1.8
Don't know	3	-	-	2	-	-
Decline to respond	0	-	-	0	-	-
Satisfaction with information provided by community health workers						
Very dissatisfied	28	25.2	5.7	3	3.5	2.4
Dissatisfied	6	5.8	3.3	3	5.6	5.8
Satisfied	68	62.9	6.4	43	86.8	6.7
Very satisfied	10	6.0	2.7	4	4.2	1.6
Don't know	2	-	-	2	-	-
Decline to respond	0	-	-	0	-	-
Satisfaction with respectfulness shown by community health workers						
Very dissatisfied	28	25.1	5.8	3	3.5	2.4
Dissatisfied	6	8.4	4.1	3	5.6	5.8
Satisfied	70	60.9	5.6	43	86.8	6.7
Very satisfied	9	5.6	2.4	4	4.2	1.6
Don't know	1	-	-	2	-	-
Decline to respond	0	-	-	0	-	-

D4.3 Counseling provided in health facilities

Respondents who had visited a health facility in the last 12 months (578 women at the second follow-up) were asked whether they were given counseling about certain topics by health center personnel. Approximately 12.7% of women in the second follow-up reported receiving guidance or advice about breastfeeding in the 12 months preceding the interview (Table D4.4). Approximately 12.6% of women in the second follow-up reported receiving guidance or advice about child nutrition in the 12 months preceding the interview (Table D4.4). Approximately 14.6% of women in the second follow-up reported receiving guidance or advice about danger signs for children's health in the 12 months preceding the interview (Table D4.4).

Table D4.4: Exposure to breastfeeding, child nutrition, and child health interventions, women 15-49 years

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
On breastfeeding	235	854	22.6	2.1	89	573	12.7	4.5
On child nutrition	258	854	25.6	2.3	90	574	12.6	3.2
On danger signs for children's health	293	853	29.2	2.6	89	573	14.6	4.5

D4.4 Counseling provided in health facilities to women with children

In the follow-up survey, respondents who had visited a health facility in the last 12 months and who had children (512 women at the second follow-up) were asked whether they were given counseling about certain topics by health center personnel.

Table D4.5: Counseling provided in health facilities to women with children

	Second Follow-Up 2017			
	n	N	%	SE
Deworming	112	509	20.2	5.2
Diarrhea treatment with ORS and zinc	73	508	11.1	3.3
Micronutrients	44	509	7.7	2.8

Questions about these topics were not asked at baseline. They were added to the second follow-up survey to track exposure to SMI interventions.

D5. CHAPTER 5: FAMILY PLANNING

This chapter summarizes key indicators related to the knowledge of, access to, need for, and use of family planning methods among women of reproductive age (15-49 years) participating in the SMI-Honduras second follow-up household survey.

Family planning questions were asked only to women of reproductive age who were married or partnered. During the SMI-Honduras baseline household survey, family planning questions were asked to women whose marital status was reported as "married" or "partnered" by the SMI-Honduras household census respondent. During the second follow-up, the family planning section was instead conditioned on a question about marital status asked to the respondent herself at the start of the woman's health interview. This captured participants who had a change in marital status between the census and household survey and participants whose marital status was incorrectly recorded in the census. At the baseline, 1,088 women qualified for the family planning questions, and at the second follow-up, 645 women qualified.

D5.1 Knowledge of the Fertile Period

The successful use of family planning methods depends on an understanding of when during the menstrual cycle a woman is most likely to conceive. This is especially true for traditional methods such as the rhythm method (i.e., periodic abstinence) and the withdrawal method. To assess knowledge of the fertile period, women were asked if there are certain days when a woman is more likely to become pregnant, and when during the menstrual cycle those days occur. Responses to these questions are summarized in Table D5.1. In the second follow-up, 73.9% of women indicated that there were certain days when a woman is more likely to become pregnant, and of these women, only 13% identified the correct timing of the fertile period (halfway between two periods).

Table D5.1: Knowledge of the fertile period, women 15-49 years of age who are married or partnered

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Knowledge of the fertile period	679	968	69.4	2.9	447	575	73.9	4.3

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Knowledge of timing of fertile period, among women who know of fertile period						
Just before period	50	8.5	1.7	38	6.1	1.1
During period	11	1.1	0.4	6	1.1	0.5
Just after period	508	80.4	2.4	321	79.2	3.3
Halfway between periods	68	10.0	1.4	40	13.0	3.2
Other	0	0.0	-	3	0.6	0.4
Don't know	41	-	-	39	-	-
Decline to respond	1	-	-	0	-	-

D5.2 Use of Family Planning Methods

D5.2.1 Current use

The coverage of contraceptive methods is one of the indicators most frequently used to assess the success of family planning program activities. It is also widely used as a determinant of fertility. Women who said they had heard of a family planning method were asked if they were currently using that method. Table D5.2 displays the percentage of all women using at least one family planning method, as well as the percentage of women reporting use of more than one family planning method at the time of the interview. Sixty six percent of all survey respondents in the second follow-up reported current use of at least one family planning method.

Women considered "in need" of family planning methods are those who are married or partnered, excluding those who report the following characteristics: does not have sexual relations, virgin,

menopausal, infertile, hysterectomy, pregnant, or wants to become pregnant. Even women not considered "in need" of contraception may use a method. Table D5.3 shows the uptake of modern family planning methods among all married and partnered women (66%), and among women considered "in need" of contraception (76.9%).

Table D5.2: Current use of family planning methods, women 15-49 years of age who are married or partnered

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Currently in need of contraception	892	1087	79.0	1.9	540	645	83.3	2.6
Current use of any method, among all women	678	1087	56.2	2.9	445	645	66.0	3.7

Table D5.3: Current use of modern family planning methods, women 15-49 years of age who are married or partnered and in need of contraception

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Current use of any method	657	892	68.3	3.8	430	540	76.9	3.4
Current use of modern method	617	892	63.6	4.0	411	540	74.7	3.8

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Number of methods the respondent is currently using						
Not using any family planning methods	238	31.9	3.7	111	23.2	3.4
Using 1 family planning method	646	67.4	3.7	429	76.8	3.4
Using 2 family planning methods	8	0.7	0.5	0	0.0	-
Not using any family planning methods	0	0.0	-	0	0.0	-
Using 1 family planning method	0	0.0	-	0	0.0	-
Using 2 family planning methods	0	0.0	-	0	0.0	-

Table D5.4 displays the percentage of all women using specific family planning methods. The methods most commonly in use during the second follow-up are injectables (22.8%) and female sterilization (18.5%).

Table D5.4: Current use of family planning methods, by type of method, for women 15-49 years of age who are married or partnered

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Injectable	297	1086	23.1	2.2	154	644	22.8	2.3
Female sterilization	126	1086	12.1	1.8	107	645	18.5	2.2
Oral contraceptive	102	1082	8.2	1.4	70	644	11.3	2.5
Intrauterine device (IUD)	83	1086	6.6	1.0	54	645	6.7	1.4
Implant	2	1085	0.5	0.4	23	645	3.4	1.1
Rhythm	27	1086	2.7	0.6	17	645	1.7	0.5
Male condom	28	1086	2.2	0.7	15	645	1.2	0.5
Withdrawal	11	1086	0.9	0.3	3	644	0.3	0.2
Emergency contraception (Plan B)	0	1086	0.0	-	1	645	0.1	0.1
Male sterilization	1	1086	0.0	-	0	645	0.0	-
Female condom	0	1086	0.0	-	0	645	0.0	-
Diaphragm	1	1086	0.0	-	0	645	0.0	-
Sponge	0	1086	0.0	-	0	645	0.0	-
Lactational amenorrhea	5	1086	0.3	0.2	0	645	0.0	-
Other modern method	0	1086	0.0	-	0	645	0.0	-
Other traditional method	1	1086	0.1	0.1	0	642	0.0	-

* categories not mutually exclusive (select all that apply)

D5.3 Sources of Family Planning Methods

Information on where women obtain contraceptive methods is important for family planning program managers. The places where the currently-used family planning methods were acquired are summarized in Table D5.5.

The public sector is the source most commonly reported by users of most modern family planning methods, including female sterilization. Pharmacies are important sources for injectables, the pill, and male condoms. Women report learning about traditional methods in the public sector, from friends or relatives, or at church (Table D5.6).

Table D5.5: Source of modern family planning methods, women 15-49 years of age who are married or partnered

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Injectable						
CESAMO	151	53.6	6.9	81	55.3	9.0
Pharmacy	18	6.7	2.0	37	26.9	8.3
CESAR	96	31.0	6.5	19	10.9	5.2
Private health clinic	7	1.7	0.7	7	3.7	1.6
Private doctor's office	2	1.0	0.7	3	1.2	0.9

(continued)

	n	%	SE	n	%	SE
CMI	3	0.8	0.5	5	0.6	0.6
Community health worker	4	0.9	0.5	1	0.5	0.5
Public hospital	7	2.2	1.0	0	0.0	-
Public mobile clinic	1	0.4	0.4	0	0.0	-
Other public health facility	2	0.5	0.4	0	0.0	-
Private hospital	0	0.0	-	0	0.0	-
Private mobile clinic	1	0.4	0.4	0	0.0	-
Other private health facility	0	0.0	-	0	0.0	-
Traditional healer	0	0.0	-	0	0.0	-
Store	0	0.0	-	0	0.0	-
Market	0	0.0	-	0	0.0	-
Church	0	0.0	-	0	0.0	-
Friend/relative	1	0.2	0.2	0	0.0	-
Type 3 Polyclinic	0	0.0	-	0	0.0	-
Other	3	0.6	0.4	1	0.9	0.9
Don't know	1	-	-	0	-	-
Decline to respond	1	-	-	0	-	-
Female sterilization						
Public hospital	85	74.5	6.9	81	70.8	6.6
Private health clinic	10	6.4	2.2	6	9.8	5.0
CESAMO	11	5.2	2.1	2	5.0	4.0
Private mobile clinic	0	0.0	-	1	4.2	4.2
Private doctor's office	1	0.6	0.6	4	0.8	0.6
CMI	2	0.8	0.5	2	0.8	0.8
Other public health facility	4	1.8	1.5	1	0.7	0.7
Community health worker	0	0.0	-	1	0.6	0.7
Private hospital	4	1.6	0.8	2	0.2	0.2
Public mobile clinic	2	6.0	5.3	0	0.0	-
Other private health facility	3	2.0	1.2	0	0.0	-
Pharmacy	0	0.0	-	0	0.0	-
Traditional healer	0	0.0	-	0	0.0	-
Store	0	0.0	-	0	0.0	-
Market	0	0.0	-	0	0.0	-
Church	0	0.0	-	0	0.0	-
Friend/relative	0	0.0	-	0	0.0	-
CESAR	0	0.0	-	0	0.0	-
Type 3 Polyclinic	0	0.0	-	0	0.0	-
Other	3	1.1	0.8	6	7.1	3.9
Don't know	0	-	-	1	-	-
Decline to respond	1	-	-	0	-	-
Oral contraceptive						
CESAMO	33	29.3	7.6	42	62.7	10.8
Pharmacy	38	38.7	5.8	20	29.3	10.8
Public mobile clinic	0	0.0	-	1	1.7	1.6
CMI	1	0.6	0.6	2	1.0	0.9
CESAR	25	28.2	6.9	1	0.9	1.0
Private hospital	0	0.0	-	1	0.1	0.1
Public hospital	0	0.0	-	0	0.0	-
Other public health facility	1	0.7	0.7	0	0.0	-
Private health clinic	2	1.1	0.8	0	0.0	-

(continued)

	n	%	SE	n	%	SE
Private doctor's office	0	0.0	-	0	0.0	-
Private mobile clinic	0	0.0	-	0	0.0	-
Other private health facility	1	0.6	0.6	0	0.0	-
Community health worker	0	0.0	-	0	0.0	-
Traditional healer	0	0.0	-	0	0.0	-
Store	0	0.0	-	0	0.0	-
Market	0	0.0	-	0	0.0	-
Church	0	0.0	-	0	0.0	-
Friend/relative	0	0.0	-	0	0.0	-
Type 3 Polyclinic	0	0.0	-	0	0.0	-
Other	1	0.8	0.8	3	4.3	3.1
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-
Intrauterine device (IUD)						
CESAMO	35	42.5	8.1	21	43.7	13.4
CESAR	11	12.9	6.3	6	11.8	6.4
Public hospital	11	14.7	5.7	6	11.7	5.7
Private doctor's office	5	8.7	4.6	9	10.4	4.7
Private health clinic	7	5.6	2.5	2	8.7	6.3
Private mobile clinic	0	0.0	-	3	6.0	3.4
Private hospital	2	2.1	1.4	2	3.2	2.3
Public mobile clinic	0	0.0	-	2	2.0	2.0
CMI	5	5.0	2.2	1	2.0	1.9
Other public health facility	2	3.0	2.2	0	0.0	-
Other private health facility	1	0.6	0.6	0	0.0	-
Pharmacy	0	0.0	-	0	0.0	-
Community health worker	0	0.0	-	0	0.0	-
Traditional healer	0	0.0	-	0	0.0	-
Store	1	1.3	1.2	0	0.0	-
Market	0	0.0	-	0	0.0	-
Church	0	0.0	-	0	0.0	-
Friend/relative	0	0.0	-	0	0.0	-
Type 3 Polyclinic	0	0.0	-	0	0.0	-
Other	3	3.7	3.1	2	0.4	0.3
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-
Implant						
CESAMO	1	47.3	31.7	17	61.3	20.5
CESAR	1	37.4	30.2	6	35.4	20.9
CMI	0	0.0	-	1	3.3	3.5
Public hospital	0	0.0	-	0	0.0	-
Public mobile clinic	0	0.0	-	0	0.0	-
Other public health facility	0	0.0	-	0	0.0	-
Private hospital	0	0.0	-	0	0.0	-
Private health clinic	0	0.0	-	0	0.0	-
Private doctor's office	1	15.3	16.1	0	0.0	-
Private mobile clinic	0	0.0	-	0	0.0	-
Other private health facility	0	0.0	-	0	0.0	-
Pharmacy	0	0.0	-	0	0.0	-
Community health worker	0	0.0	-	0	0.0	-

(continued)

	n	%	SE	n	%	SE
Traditional healer	0	0.0	-	0	0.0	-
Store	0	0.0	-	0	0.0	-
Market	0	0.0	-	0	0.0	-
Church	0	0.0	-	0	0.0	-
Friend/relative	0	0.0	-	0	0.0	-
Type 3 Polyclinic	0	0.0	-	0	0.0	-
Other	0	0.0	-	0	0.0	-
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	1	-	-
Male condom						
Pharmacy	6	13.5	6.5	7	43.6	13.0
CESAMO	13	31.7	11.9	5	32.7	19.8
CESAR	8	51.5	15.8	1	12.9	9.0
Market	0	0.0	-	1	9.7	6.7
Public hospital	1	3.3	3.3	1	1.0	1.1
Public mobile clinic	0	0.0	-	0	0.0	-
Other public health facility	0	0.0	-	0	0.0	-
Private hospital	0	0.0	-	0	0.0	-
Private health clinic	0	0.0	-	0	0.0	-
Private doctor's office	0	0.0	-	0	0.0	-
Private mobile clinic	0	0.0	-	0	0.0	-
Other private health facility	0	0.0	-	0	0.0	-
Community health worker	0	0.0	-	0	0.0	-
Traditional healer	0	0.0	-	0	0.0	-
Store	0	0.0	-	0	0.0	-
Church	0	0.0	-	0	0.0	-
Friend/relative	0	0.0	-	0	0.0	-
CMI	0	0.0	-	0	0.0	-
Type 3 Polyclinic	0	0.0	-	0	0.0	-
Other	0	0.0	-	0	0.0	-
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-

*Female condom and sponge omitted from table because no women reported receiving them in baseline or follow-up.

Table D5.6: Source of knowledge about traditional family planning methods, women 15-49 years of age who are married or partnered

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Lactational amenorrhea						
Public hospital	0	0.0	-	0	0.0	-
Public mobile clinic	0	0.0	-	0	0.0	-
Other public health facility	0	0.0	-	0	0.0	-
Private hospital	0	0.0	-	0	0.0	-
Private health clinic	0	0.0	-	0	0.0	-
Private doctor's office	0	0.0	-	0	0.0	-
Private mobile clinic	0	0.0	-	0	0.0	-

Other private health facility	0	0.0	-	0	0.0	-
Pharmacy	0	0.0	-	0	0.0	-
Community health worker	0	0.0	-	0	0.0	-
Traditional healer	0	0.0	-	0	0.0	-
Store	0	0.0	-	0	0.0	-
Market	0	0.0	-	0	0.0	-
Church	0	0.0	-	0	0.0	-
Friend/relative	2	68.9	26.6	0	0.0	-
CESAR	0	0.0	-	0	0.0	-
CESAMO	1	31.1	26.6	0	0.0	-
CMI	0	0.0	-	0	0.0	-
Type 3 Polyclinic	0	0.0	-	0	0.0	-
Other	0	0.0	-	0	0.0	-
Don't know	2	-	-	0	-	-
Decline to respond	0	-	-	0	-	-
Rhythm						
Friend/relative	11	40.7	12.0	5	36.4	17.0
CESAR	2	5.8	4.3	4	32.1	16.6
Private health clinic	0	0.0	-	2	11.2	7.9
Church	6	33.3	13.0	1	4.4	4.3
Other private health facility	0	0.0	-	1	0.8	0.9
Public hospital	1	3.1	3.1	0	0.0	-
Public mobile clinic	0	0.0	-	0	0.0	-
Other public health facility	0	0.0	-	0	0.0	-
Private hospital	0	0.0	-	0	0.0	-
Private doctor's office	0	0.0	-	0	0.0	-
Private mobile clinic	0	0.0	-	0	0.0	-
Pharmacy	0	0.0	-	0	0.0	-
Community health worker	0	0.0	-	0	0.0	-
Traditional healer	0	0.0	-	0	0.0	-
Store	0	0.0	-	0	0.0	-
Market	0	0.0	-	0	0.0	-
CESAMO	6	14.9	6.4	0	0.0	-
CMI	0	0.0	-	0	0.0	-
Type 3 Polyclinic	0	0.0	-	0	0.0	-
Other	1	2.2	2.3	4	15.2	9.8
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-
Withdrawal						
Public hospital	0	0.0	-	0	0.0	-
Public mobile clinic	0	0.0	-	0	0.0	-
Other public health facility	0	0.0	-	0	0.0	-
Private hospital	0	0.0	-	0	0.0	-
Private health clinic	0	0.0	-	0	0.0	-
Private doctor's office	0	0.0	-	0	0.0	-
Private mobile clinic	0	0.0	-	0	0.0	-
Other private health facility	0	0.0	-	0	0.0	-
Pharmacy	0	0.0	-	0	0.0	-
Community health worker	0	0.0	-	0	0.0	-
Traditional healer	0	0.0	-	0	0.0	-
Store	0	0.0	-	0	0.0	-
Market	0	0.0	-	0	0.0	-
Church	0	0.0	-	0	0.0	-

Friend/relative	7	71.2	17.9	0	0.0	-
CESAR	1	11.6	11.2	0	0.0	-
CESAMO	2	17.2	15.7	0	0.0	-
CMI	0	0.0	-	0	0.0	-
Type 3 Polyclinic	0	0.0	-	0	0.0	-
Other	0	0.0	-	2	100.0	0.0
Don't know	1	-	-	1	-	-
Decline to respond	0	-	-	0	-	-

D5.4 Non-Use and Interruption of Use of Family Planning Methods

Non-use and interruption of use of family planning methods are major concerns for family planning program managers.

D5.4.1 Prevalence of interruption

The prevalence of interruption and non-use of family planning methods is summarized in Table D5.7. Of women participating in the second follow-up survey, 83.3% are considered "in need" of contraception (i.e., they did not report any of the following: does not have sexual relations, virgin, menopausal, infertile, hysterectomy, pregnant, or wants to become pregnant). Among these women in need, 3.8% reported any interruption in the use of family planning methods in the previous year.

Table D5.7: Interruption and non-use of family planning methods, among women 15-49 years of age who are married or partnered and in need of contraception

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Discontinuation rate*	23	892	3.7	1.1	19	540	3.8	1.5

* any interruption in use during the last year, among women in need of contraception

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Number of interruptions in use during the last year						
none	869	96.3	1.1	521	96.2	1.5
once	23	3.7	1.1	19	3.8	1.5
2-6 times per year	0	0.0	-	0	0.0	-
7-12 times per year	0	0.0	-	0	0.0	-
>12 times per year	0	0.0	-	0	0.0	-

D5.4.2 Reasons for non-use

Women who interrupted use of family planning methods in the year preceding the interview, and those who indicated they were not using any method on the day of the interview, were asked to specify all

reasons why they did not use a method. The interviewer matched responses provided by the respondent to a list of reasons in the questionnaire (Table D5.8). The most commonly cited reasons for non-use at the time of the second follow-up interview were, not sexually active (18.3%), respondent is do not like to use contraception (16.4%), and respondent is concerned about side effects (7.1%).

Table D5.8: Reasons for non-use of family planning methods, women 15-49 years of age who are married or partnered and who are not using family planning methods

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Not sexually active	59	372	15.0	3.0	37	192	18.3	2.6
Do not like to use contraception	78	372	18.0	3.3	34	192	16.4	4.2
Concerned about side effects	14	372	2.6	0.7	11	192	7.1	3.2
Trying to become pregnant	30	372	11.0	3.0	10	192	6.8	2.8
Menopausal	24	372	5.8	1.5	10	192	5.5	3.2
Unmarried	13	372	4.8	2.3	5	192	4.1	2.4
Currently pregnant	24	372	4.8	1.2	10	192	3.9	1.4
Using contraception interferes with normal body processes	5	372	1.3	0.6	10	192	3.7	1.1
Opposed to use	19	372	4.2	1.6	7	192	3.1	1.7
Infrequently sexually active	24	372	10.3	2.7	4	192	3.0	2.0
No menstrual period since giving birth	7	372	1.3	0.6	6	192	2.2	1.3
Breastfeeding	17	372	2.7	0.7	8	192	2.2	0.7
Infertile	17	372	7.6	2.6	6	192	2.1	1.0
Married	32	372	9.6	3.4	3	192	1.8	1.7
Spouse or partner opposed to use	13	372	3.7	1.5	4	192	1.6	1.3
The method is too expensive	0	372	0.0	-	2	192	0.9	0.6
Against religious beliefs	11	372	2.2	0.7	2	192	0.6	0.4
Knows no source for methods	3	372	0.5	0.4	1	192	0.6	0.6
Preferred method was not available	1	372	0.3	0.3	1	192	0.6	0.6
No method was available	1	372	0.3	0.3	1	192	0.6	0.6
Health facility staff difficult to deal with	1	372	0.1	0.1	1	192	0.6	0.6
Using contraception is uncomfortable	7	372	1.4	0.6	2	192	0.6	0.5
Have undergone hysterectomy	3	372	0.4	0.3	1	192	0.3	0.3
The health facility is too far away	5	372	1.0	0.5	1	192	0.3	0.3
Virgin	0	372	0.0	-	0	192	0.0	-
Others opposed to use	3	372	0.6	0.3	0	192	0.0	-
Knows no method	4	372	0.7	0.4	0	192	0.0	-
Could not find transportation to a health facility	1	372	0.3	0.3	0	192	0.0	-
Could not afford transportation	2	372	0.4	0.3	0	192	0.0	-
Mistrust health center staff	1	372	0.1	0.1	0	192	0.0	-
Other	37	372	12.8	3.4	27	192	18.5	5.0

* "Using contraception affects health" was an option offered in the second follow-up, but was not available at baseline. 8 women selected this as a reason for not using family planning at the second follow-up.

* categories not mutually exclusive (select all that apply)

D5.5 Family Planning Intentions and Decision-Making

D5.5.1 Participation in family planning decision

In this setting in the second follow-up, 68.3% of women report that decisions about family planning methods are jointly made by the respondent and her partner. In only 1.7% of cases, the decision to use family planning methods is up to the respondent's partner alone.

Table D5.9: Participation in family planning decision-making, women 15-49 years of age who are married or partnered and are currently using family planning methods

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Joint decision	671	82.7	1.9	412	68.3	3.9
Mostly the respondent	125	13.4	1.5	131	29.0	4.0
Mostly respondent's spouse/partner	33	3.8	1.0	10	1.7	0.8
Others	1	0.1	0.1	4	0.6	0.4
Not applicable - not partnered	0	0.0	-	5	0.4	0.3
Don't know	2	-	-	1	-	-
Decline to respond	4	-	-	1	-	-

D5.5.2 Informed choice

With respect to use of family planning methods, "informed choice" refers to whether or not health care workers described other options for family planning methods, possible side effects associated with the method of choice, and how to respond to side effects if they occur. This information can be used to help women select an appropriate contraceptive method, and to assist users in coping with side effects (thus decreasing discontinuation rates for non-permanent methods).

Table D5.10 shows the percent of women currently using family planning methods who were told about other options for contraception (46.3% of women in the second follow-up).

Table D5.10: Family planning decision-making, informed choice, women 15-49 years of age who are married or partnered and who are currently using family planning methods

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Informed about other family planning options by a doctor, nurse, or community health worker	379	833	47.1	3.6	273	564	46.3	5.3

D5.6 Exposure to Family Planning Information

D5.6.1 Family planning messages delivered by health care providers

Respondents were asked about their exposure to family planning messages delivered by health care providers (Table D5.11). Forty two percent of women in the second follow-up reported being advised about family planning at the health care facility they attend during the past 12 months. Fourteen percent of all respondents indicated that they had been visited by a health promoter who provided information about family planning in the last 12 months. Just 3.7% of respondents who had not attended a health facility in the last 12 months were visited by a health promoter who provided information about family planning.

Table D5.11: Family planning messages delivered by health care providers in the last 12 months, women 15-49 years of age who are married or partnered

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Discussion about family planning methods with staff member at a health facility	316	521	60.4	3.5	155	342	42.0	5.7
Discussion about family planning methods during health promoter visit	109	1081	10.1	1.5	84	640	14.5	3.1
Visit by promotor, among women who had not visited a health facility	12	558	3.2	1.3	12	298	3.7	1.4

D5.7 Age at First Birth

D5.7.1 Age at first birth

Seventy three percent of respondents in the second follow-up had ever given birth (Table D5.12). Of these women, the median age of the women when their first child was born was 19 years old. Only a quarter of women were 21 years old or older when their first child was born. Nine percent of women reported a history of stillbirth, miscarriage, and/or abortion.

Table D5.12: Parity and age at first birth, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Ever given birth	1385	1690	75.7	1.9	793	975	73.4	2.6
Ever had a stillbirth, miscarriage, or abortion	145	1685	8.2	1.2	94	974	8.6	1.4

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Age at first birth, among parous women	1379	4	10	17	19	21	39
Second follow-up 2017							
Age at first birth, among parous women	793	0	13	17	19	21	40

D6. CHAPTER 6: MATERNAL HEALTH CARE

This chapter summarizes key indicators pertaining to antenatal care, delivery care, and postpartum care for the most recent live birth in the last two years as reported by women of reproductive age (15-49 years) participating in the SMI-Honduras second follow-up household survey. Participating women were interviewed about all live births in the last five years, but to reduce the impact of recall bias, results reported here are for each woman's most recent birth in the last two years. At the baseline, 647 women were interviewed about at least one birth in the last two years. At the second follow-up, 310 women were interviewed about births in the last two years.

D6.1 Antenatal Care

To reduce recall bias, data pertaining to antenatal care are summarized for a woman's most recent birth in the last two years.

D6.1.1 Antenatal care coverage

Early and regular checkups by trained medical providers are important in assessing the physical status of women during pregnancy and provide an opportunity to intervene in a timely manner if any problems are detected. The Maternal and Child Health Questionnaire captured information from women on both overall coverage of antenatal care and the content of care received. To obtain information on source of antenatal care, interviewers recorded all persons a woman consulted for care. Timing of antenatal care was assessed by asking women how many weeks or months pregnant they were when they attended their first antenatal care visit. The same details were recorded for up to eight antenatal care visits.

The percentage of women with a birth in the last two years who attended at least one antenatal care visit for the most recent birth, and the percent distribution of timing of care among those who received any antenatal care are presented in Table D6.1. Definition of "most recent birth" changed between baseline and second follow-up. The type of facility where antenatal care was sought is detailed in Table D6.2.

Among women with a child under the age of 2 in the second follow-up, 95.8% attended at least one antenatal care visit and 93.2% of women had at least one antenatal care visit with a doctor or professional nurse. At the second follow-up, 63.2% of women had an antenatal care visit during the first trimester (first 12 weeks) with a doctor or professional nurse, compared to 48.6% at the baseline. The median age of gestation at the first antenatal care visit during the second follow-up was 2 months.

Table D6.1: Antenatal care coverage for the most recent birth in the last two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Attended at least one antenatal care visit	617	646	95.8	1.0	298	310	95.8	1.3
Attended at least one antenatal care visit with doctor or professional nurse	572	647	88.3	2.0	292	310	93.2	2.2
Antenatal care visit with doctor or professional nurse in the first trimester (12 weeks)	328	641	48.6	3.4	193	307	63.2	3.0

* Definition of most recent birth changed between baseline and second follow-up

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Month of gestation of first ANC visit	612	5	0.2	1	2	4	9
Second follow-up 2017							
Month of gestation of first ANC visit	295	3	0.5	1	2	3	9

Regarding the type of facility where antenatal care was usually sought during the second follow-up (Table D6.2), most women who attended antenatal care for their most recent delivery in the last two years sought care in a CESAMO (61%) or CESAR (17.5%). Only 6.5% of women sought antenatal care in a cmi.

Table D6.2: Usual antenatal care location, women 15-49 years of age who attended at least one antenatal care visit for most recent birth in the last two years

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
CESAMO	327	50.5	5.0	171	61.0	7.8
CESAR	165	30.5	5.2	40	17.5	7.8
CMI	22	3.4	0.8	31	6.5	3.1
Private health clinic	54	7.8	1.6	20	5.8	1.6
Private doctor's office	20	2.6	1.0	19	3.8	1.5
Public hospital	9	1.8	0.8	3	1.2	0.8
Private hospital	4	0.6	0.3	2	0.7	0.5
Public mobile clinic	0	0.0	-	1	0.4	0.4
Other public health facility	6	1.3	0.6	1	0.4	0.4
Private mobile clinic	1	0.2	0.2	1	0.4	0.4
Other private health facility	1	0.1	0.1	0	0.0	-
Pharmacy	0	0.0	-	0	0.0	-
Community health worker	1	0.1	0.1	0	0.0	-
Traditional healer	0	0.0	-	0	0.0	-
Other	7	1.2	0.5	8	2.3	1.1
Don't know	0	-	-	1	-	-
Decline to respond	0	-	-	0	-	-

D6.1.2 Frequency of antenatal care visits

Antenatal care can be more effective in avoiding adverse pregnancy outcomes when it is sought early in the pregnancy and continues until delivery. According to the national norm in Honduras, it is recommended that women receive a minimum of four antenatal care visits. The frequency of antenatal care visits is summarized in Table D6.3. Table D6.4 shows the percentage of women with four or more visits with skilled providers and according to best practices.

In the second follow-up, 88.8% of women reported having four or more antenatal care visits during their most recent pregnancy in the last two years. Sixty two percent of women reported having seven or more antenatal care visits during their most recent pregnancy.

The content of antenatal care is as crucial as the frequency of visits. As shown in Table D6.4, 41.7 percent of all women in the second follow-up survey had four or more antenatal care visits with a doctor or professional nurse, and with each of 10 defined best practices performed at least once during pregnancy (measurement of blood type, test for anemia, test for syphilis, test for HIV, test of blood glucose, test for proteinuria, measurement of maternal blood pressure, measurement of maternal weight, measurement of fundal height, and measurement of fetal heartbeat).

Table D6.3: Frequency of antenatal care visits for the most recent birth in the last two years, women 15-49 years of age

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
None	29	4.2	1.0	12	4.3	1.3
1-3 visits	66	10.9	1.2	20	6.9	1.3
4-6 visits	197	33.4	2.5	76	26.7	2.6
7-9 visits	344	50.9	2.4	195	61.5	2.8
10+ visits	4	0.6	0.3	4	0.6	0.4
Don't know	5	-	-	1	-	-
Decline to respond	0	-	-	0	-	-

Table D6.4: Frequency of antenatal care visits with skilled provider for the most recent birth in the last two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
At least four antenatal care visits with doctor or professional nurse	494	641	76.7	2.4	271	309	86.3	2.5
At least four antenatal care visits with doctor or professional nurse according to best practices*	129	641	21.1	2.1	124	309	41.7	5.8

*measuring blood type, anemia, syphilis, HIV, glucose, proteinuria, blood pressure, weight, fundal height, fetal heartbeat

D6.1.3 Content of antenatal care

The content of antenatal care is an important indicator of quality of care. The coverage of key procedures was assessed among women who received any antenatal care for a birth in the last two years (Table D6.5 and Table D6.6). It is important to remember that the validity of these data hinge on the respondent's understanding of the question and her ability to recall events that may have occurred several years prior to the interview.

There was variation in performance of the 10 "best practice" procedures during the second follow-up: measured maternal blood pressure (98.1%), measured maternal weight (97.8%), measured fetal heartbeat (97.4%), tested for proteinuria (96.1%), measured fundal height (95.7%), measured blood type (94.1%), tested for anemia (91.6%), tested for HIV (82.1%), measured blood glucose (80.6%), and tested for syphilis (69.5%). Women were unfamiliar with several tests, as evidenced by the high number of missing responses for proteinuria and syphilis in particular.

Table D6.5: Content of antenatal care visits - best practices, among women 15-49 years who attended at least one antenatal care visit for most recent birth in the last two years

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Measured maternal blood pressure	601	616	97.7	0.6	290	298	98.1	0.9
Measured maternal weight	607	617	98.5	0.4	289	298	97.8	1.0
Measured fetal heartbeat	544	614	88.5	2.3	291	298	97.4	0.9
Tested for proteinuria	494	564	87.9	1.7	261	275	96.1	1.6
Measured fundal height	464	609	76.6	3.0	285	297	95.7	2.0
Measured blood type	486	576	84.2	2.0	263	283	94.1	1.9
Tested for anemia	503	591	84.6	1.8	257	282	91.6	2.0
Tested for HIV	355	590	59.2	2.6	249	294	82.1	6.0
Measured blood glucose	359	567	61.5	2.8	227	275	80.6	4.2
Tested for syphilis	297	525	56.9	3.5	173	248	69.5	7.7

Most women in the second follow-up had a collected blood specimen (95.3%) and a collected urine specimen (94.6%) collected during their antenatal care visits for the most recent birth during the past two years.

Table D6.6: Content of antenatal care visits - other services provided, among women 15-49 years who attended at least one antenatal care visit for most recent birth in the last two years

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Collected blood specimen	600	616	97.6	0.5	285	298	95.3	1.4
Collected urine specimen	590	617	95.2	1.1	282	298	94.6	2.0
Offered an HIV test	411	593	67.4	3.0	265	295	88.3	4.2
Performed an ultrasound	407	615	65.5	3.7	242	297	78.1	5.8
Tested for diabetes	250	355	70.9	3.6	172	223	78.0	5.9

D6.1.4 Coverage of tetanus toxoid vaccinations during pregnancy

Tetanus toxoid injections are given during pregnancy for the prevention of neonatal tetanus. To prevent transmission of this potentially fatal infection, all women should be vaccinated with tetanus toxoid when they become pregnant. A baby is considered protected if the mother receives two doses of tetanus toxoid during pregnancy, with the second at least two weeks before delivery. However, if a woman was vaccinated previously, she only requires one dose during the current pregnancy. Five doses are considered adequate to confer lifetime immunity. To assess the coverage of tetanus toxoid vaccination, women who reported receiving any antenatal care during their most recent pregnancy were asked if they received tetanus toxoid injections.

As shown in Table D6.7, the coverage of sufficient tetanus toxoid vaccination during pregnancy was 60.1% among women who received antenatal care during the second follow-up. Thirty nine percent of women received one vaccination during the pregnancy and 48.2% received two or more. Among women with antenatal care, 36% had never been vaccinated before and 15.8% had received a vaccine in the last 10 years. Among women who were not vaccinated during prenatal care visits, 8.8% had never been vaccinated.

Table D6.7: Coverage of tetanus toxoid vaccinations during pregnancy, among women 15-49 years who attended at least one antenatal care visit for most recent birth in the last two years

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Two or more injections during pregnancy	142	46.2	4.3	102	48.2	4.7
One injection during pregnancy, one <10 years before	40	13.7	2.3	25	11.9	2.8
One injection during pregnancy, none <10 years before	39	13.9	2.8	63	27.2	3.9
No injections during pregnancy, one or more <10 years before	26	8.1	1.3	9	3.9	1.8
No injections during pregnancy nor during the 10 years prior	55	18.0	3.1	22	8.8	2.1
Don't know	313	-	-	77	-	-
Decline to respond	2	-	-	0	-	-

D6.1.5 Exposure to safe pregnancy messages

Women who received antenatal care were asked about a series of topics for which they might have received counseling or advice during their pregnancy. Table D6.8 shows the percentage of women in the second follow-up who were exposed to the following messages: counseled about pregnancy (93.6%); counseled about danger signs during pregnancy (89.6%); counseled about nutrition during pregnancy (85.9%); given information about in-facility delivery (84%); counseled about breastfeeding (82.9%); advised to deliver in a facility (82%); counseled about contraception after delivery (79.4%).

Exposure to safe pregnancy practices increased from baseline to second follow-up for all counseling categories. In the second follow-up, 78.7% of women were counseled about childcare compared to 63.9% at baseline. 43.8% of women in the second follow-up, compared to 38.3% at baseline, were advised to have a Cesarean section. Compared to 45.5% of women at baseline, 40.1% of women in the second follow-up were counseled about making a transportation plan for delivery.

Table D6.8: Exposure to safe pregnancy practices, women 15-49 years of age who attended at least one antenatal care visit for most recent birth in the last two years

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Counseled about pregnancy	566	616	92.5	1.3	278	297	93.6	1.7
Counseled about danger signs during pregnancy	482	615	79.5	2.6	265	297	89.6	2.8
Counseled about nutrition during pregnancy	423	610	71.5	2.6	253	297	85.9	3.6
Given information about in-facility delivery	476	617	79.3	2.5	250	297	84.0	3.1
Counseled about breastfeeding	453	617	75.2	2.2	243	297	82.9	3.4
Advised to deliver in a facility	478	617	79.6	2.5	243	297	82.0	3.2
Counseled about contraception after delivery	411	616	68.9	3.1	238	297	79.4	3.2
Counseled about childcare	380	615	63.9	3.2	225	296	78.7	4.2
Advised to have a Cesarean section	217	617	38.3	3.0	118	297	43.8	6.2
Counseled about making a transportation plan for delivery	257	616	45.5	3.5	114	297	40.1	7.3

D6.2 Delivery Care

Proper medical attention and hygienic conditions during delivery can reduce the risk of complications, infections, and even death for the mother and newborn baby. Characteristics of the delivery, including place of delivery and assistance at delivery were captured for all births in the five years preceding the survey. To reduce recall bias, only data from the most recent delivery within the last two years are summarized.

D6.2.1 Place of delivery

The location of the most recent birth and the means of transportation used to get to the facility are shown in Table D6.9. The majority of births occurred in public hospitals (64.8%) and public health center/clinics (17.9%). Yet 6.9% of women reported giving birth at home or at another person's home. Deliveries in

private-sector facilities were rare (6.7%). Among women who delivered in a facility, 55.4% indicated that they used a private vehicle for transport (Table D6.10).

Table D6.9: Place of delivery for most recent birth in the last two years, women 15-49 years of age

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Public hospital	394	58.7	3.7	196	64.8	3.7
Public health center/clinic	127	21.2	2.6	56	17.9	2.6
Own home	73	12.7	2.7	18	6.9	2.8
Private health center/clinic	32	4.5	1.1	16	4.4	1.3
Other public health facility	3	0.4	0.2	7	2.4	1.3
Private hospital	4	0.7	0.3	4	1.5	0.7
Other private health facility	0	0.0	-	3	0.8	0.5
Other house	7	0.9	0.4	1	0.0	-
Public health ward	0	0.0	-	1	0.0	-
Private medical ward	0	0.0	-	0	0.0	-
Other	7	0.8	0.4	8	1.3	0.6
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-

Table D6.10: Transportation to place of delivery for most recent birth in the last two years, among women 15-49 years of age who delivered in a facility

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Private vehicle	356	560	61.2	3.9	153	283	55.4	3.9
Other public transit	112	560	19.0	2.3	89	283	29.8	4.1
Ambulance	92	560	20.0	4.2	45	283	16.3	2.8
On foot	18	560	3.2	0.8	8	283	2.8	1.4

*categories not mutually exclusive (select all that apply)

Women were asked about the proximity to the health facility used to deliver. Of the 283 women from the second follow-up who delivered in a facility, 171 were able to estimate the distance to the facility (Table D6.11). The median number of women reported travelling less than 25 km. Fifty percent of women traveled more than one hours to the facility to deliver.

Table D6.11: Proximity to health care facilities: health facility for delivery

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Distance, km	78	482	0	4	15.9	45	100
Travel time, min	536	24	1	47.4	90	120	2700
Second follow-up 2017							
Distance, km	171	112	0.5	5	25	60	100
Travel time, min	276	7	5	40	60	180	2700

D6.2.2 Assistance at delivery

The assistance a woman receives during childbirth has important health consequences for both mother and child. For women who did not deliver alone in the last two years (98% of all births in the second follow-up), the percentage by type of delivery attendant is detailed in Table D6.12. Among women who did not report being alone for delivery, several categories of personnel may have been in attendance. As can be seen in Table D6.12, most in-facility deliveries during the second follow-up were accompanied by a medical doctor (88.6%) and/or a professional nurse (61.3%). For 46.4% of the deliveries an auxiliary nurse was in attendance. For 5% a midwife/comadrona was in attendance.

Table D6.12: Types of attendants: assistance at delivery for most recent birth in the last two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Medical doctor	539	646	82.2	2.7	275	310	88.6	2.8
Professional nurse	347	640	53.5	3.4	179	303	61.3	6.8
Auxiliary nurse	254	641	38.3	2.3	145	302	46.4	3.2
Midwife/comadrona	77	641	12.7	2.0	15	306	5.0	2.1
Relative	24	643	3.6	1.1	10	304	3.0	1.0
Laboratory technician	45	642	7.0	1.7	10	305	2.8	1.4
Traditional healer	1	644	0.1	0.1	5	306	1.3	0.7
Pharmacist	5	642	0.6	0.4	3	306	0.7	0.5
Community health worker	2	644	0.4	0.4	1	306	0.3	0.3
Other	0	643	0.0	-	3	305	1.3	0.7

Twenty five percent of women in the second follow-up delivered with one attendant, 38.5% with two attendants, and 32.1% with three attendants (Table D6.13). For women's most recent live birth in the past two years, 92.4% of deliveries had a skilled attendant present and 91.2% delivered with a skilled attendant in a health facility (Table D6.14).

Table D6.13: Number of attendants: assistance at delivery for most recent birth in the last two years, women 15-49 years of age

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
None	6	1.1	0.5	5	2.0	1.1
One	222	36.3	3.4	72	24.8	4.8
Two	248	36.1	3.6	134	38.5	4.9
Three	125	19.4	1.7	91	32.1	3.1
Four or more	46	7.1	1.9	8	2.6	1.2
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-

Table D6.14: In-facility delivery with skilled birth attendant: assistance at delivery for most recent birth in the last two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Delivery with a skilled birth attendant	559	647	85.1	2.6	288	310	92.4	2.9
Delivery with a skilled birth attendant in any health facility	555	647	84.7	2.6	281	310	91.2	2.9
Delivery with a skilled birth attendant in a CMI or hospital	461	647	69.4	3.1	239	310	77.9	3.7

D6.2.3 Complications

Pregnancy complications are an important source of maternal and child morbidity and mortality. The type of delivery (vaginal or Caesarian section) among women with births in the last two years is detailed in Table D6.15 along with the percentage of planned in-facility deliveries. Table D6.16 displays the percentage of women with specific complications.

As previously described, the vast majority of births occurred in institutional settings. In 49% of these cases during the second follow-up, women indicated that they attended the facility for emergency care. Few women reported seizures prior to delivery (5%). Approximately 14.8% of infants were transferred to an intensive care unit after delivery, and 21.4% of women reported excessive bleeding after delivery (more than 1 cup over a two-day period of time).

Table D6.15: Mode of delivery for most recent birth in the last two years, women 15-49 years of age

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Mode of delivery						
Vaginal	553	85.7	1.7	247	80.0	3.5
Emergency c-section	61	9.5	1.5	39	12.8	2.6
Planned c-section	33	4.8	1.0	23	7.2	1.9
Don't know	0	-	-	1	-	-
Decline to respond	0	-	-	0	-	-
Reason for seeking delivery care, among in-facility births						
According to birth plan	299	55.5	3.4	138	50.6	4.4
Because of emergency	259	44.5	3.4	143	49.0	4.3
Other reason	0	0.0	-	1	0.4	0.4
Don't know	2	-	-	1	-	-
Decline to respond	0	-	-	0	-	-

Table D6.16: Delivery complications for most recent birth in the last two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Respondent experienced excessive bleeding in the first day after delivery	153	643	22.7	2.6	70	308	21.4	2.7
Child entered neonatal intensive care unit after delivery	52	646	7.6	1.2	46	308	14.8	3.1
Respondent experienced seizures prior to delivery	54	644	9.7	1.6	18	306	5.0	1.9

D6.2.4 Birth size and weight

Birth weight is a major determinant of infant and child health and mortality. Birth weight of less than 2.5 kilograms is considered low. For all births during the five-year period preceding the survey, mothers were asked about their perception of the child's size at birth: very large, larger than average, smaller than average, or very small. They were then asked to report the actual weight in kilograms if the child had been weighed after delivery. To reduce recall bias, only data from the most recent birth within the last two years are summarized below (Table D6.17).

In the second follow-up, many women perceived their infant to be average in size (71.3%). With most births occurring in institutional settings, it is not surprising that 94% of newborns were weighed at birth. Among those who were weighed, 8.7% weighed less than 2.5 kilograms according to the mother's recall (low birth weight).

Table D6.17: Birth size and weight for most recent live birth in the past two years, women 15-49 years of age

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Very large	21	4.2	1.8	5	0.5	0.4
Larger than average	80	11.3	1.7	60	20.1	2.4
Average	461	73.4	2.7	207	71.3	2.9
Smaller than average	43	6.0	1.0	24	6.6	2.2
Very small	33	5.1	1.2	6	1.5	0.7
Don't know	9	-	-	8	-	-
Decline to respond	0	-	-	0	-	-

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Child was weighed at birth	540	614	87.5	2.0	288	303	94.0	2.5
Low birth weight (<2.5kg), among those weighed	64	443	14.7	2.4	18	222	8.7	2.1

D6.3 Early initiation of breastfeeding

Coverage of early initiation of breastfeeding is defined as the percentage of women who had a live birth in the past two years and put the child to the breast with one hour of birth. Table D6.18 shows that 71.4% of women initiated breastfeeding within one hour of birth.

Table D6.18: Early initiation of breastfeeding for most recent live birth in the past two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Early initiation of breastfeeding	502	643	78.5	2.7	213	308	71.4	3.4

D6.4 Postnatal Care

Postnatal care is important both for the mother and the child to treat complications arising from the delivery, as well as to provide the mother with important information on how to care for herself and her child. The postnatal period is defined as the time between the delivery of the placenta and 42 days (six weeks) following the delivery. The timing of postnatal care is important: the first two days after delivery are critical, because most maternal and neonatal deaths occur during this period.

Characteristics of postnatal care, including timing, location, and personnel providing care were captured for all births in the five years preceding the survey. To reduce recall bias, only data from the most recent delivery in the last two years are summarized in the tables below.

D6.4.1 Postnatal checkup for the mother

Data on postnatal care for the mother are summarized in Table D6.19. Table D6.19 shows the percentage of women with a birth in the last two years who were checked at any time after delivery and within one week after delivery; and percentage by timing of the check for women with an in-facility delivery.

Only 89.7% of women recalled being checked after delivery during the second follow-up, and 73% reported being checked one week after delivery by a health care provider. Only 44.2% of women with an institutional birth recalled being checked every 15 minutes for the first hour post-partum.

Table D6.20 shows the percent distribution of women who were checked at any time after delivery by type of personnel. Among women with postnatal care visits in the second follow-up, most received care from a doctor (85.1%) or professional nurse (10.9%).

Table D6.19: Postnatal checkup for the mother for most recent live birth in the past two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Any checkup after delivery	456	643	71.3	2.8	279	310	89.7	2.3
Checked every 15 minutes during the first hour after delivery, among in-facility births	183	418	45.3	2.8	109	249	44.2	5.0
Checked within a week after delivery by a skilled provider	347	643	51.7	3.0	230	310	73.0	5.3

Table D6.20: Provider of care at first postnatal checkup for the mother, most recent live birth in the past two years, among women who attended at least one postnatal care visit

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Doctor	347	71.3	3.5	246	85.1	3.0
Professional nurse	57	14.5	2.8	24	10.9	2.5
Auxiliary nurse	47	13.0	2.6	8	4.0	2.7
Laboratory technician	0	0.0	-	0	0.0	-
Midwife/comadrona	3	0.6	0.3	0	0.0	-
Community health worker	2	0.6	0.5	0	0.0	-
Pharmacy assistant	0	0.0	-	0	0.0	-
Traditional healer	0	0.0	-	0	0.0	-
Relative	0	0.0	-	0	0.0	-
Other	0	0.0	-	1	0.0	-
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-

D6.4.2 Postnatal checkup for the infant

The results regarding postnatal care for the neonate are shown in Table D6.21: percentage of women with a birth in the last two years whose infants were checked after delivery; percent distributions of infants

who were checked by skilled personnel within 24 hours of delivery; and percent distributions of infants who were checked by skilled personnel within one week of delivery.

Approximately 84% of women in the second follow-up reported that their infant was checked at any time after delivery. Among all deliveries, 37.9% of women reported that a qualified medical professional checked on their infant within 24 hours of delivery. Table D6.22 shows the attendants for neonatal postnatal care. Most women indicated that a doctor performed a checkup (92.5%). Professional nurse and auxiliary nurse were also reported, though much less frequently.

Table D6.21: Postnatal checkup for neonate for woman's most recent live birth in the past two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Any checkup after delivery	479	640	75.2	2.8	264	308	84.0	4.2
Checked within 24 hours after delivery by a skilled provider	202	588	32.7	2.6	111	262	37.9	6.5
Checked within a week after delivery by a skilled provider	314	588	50.4	3.2	177	262	64.6	7.6

Table D6.22: Provider of care at first postnatal checkup for the infant, woman's most recent live birth in the past two years, among women whose child attended at least one postnatal care visit

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Doctor	382	77.0	3.3	247	92.5	2.6
Professional nurse	39	7.8	1.3	8	4.0	1.4
Auxiliary nurse	50	14.1	3.4	8	3.5	2.5
Laboratory technician	1	0.2	0.2	0	0.0	-
Midwife/comadrona	0	0.0	-	0	0.0	-
Community health worker	3	0.7	0.5	0	0.0	-
Pharmacy assistant	0	0.0	-	0	0.0	-
Traditional healer	0	0.0	-	0	0.0	-
Relative	0	0.0	-	0	0.0	-
Other	1	0.2	0.2	0	0.0	-
Don't know	3	-	-	1	-	-
Decline to respond	0	-	-	0	-	-

D6.5 Vouchers, Incentives, and Maternal Waiting Homes

To increase use of their services, some facilities and waiting homes offer vouchers and incentives to women to attend care. Table D6.23 displays the percentage of women in the second follow-up who gave birth the past two years and received a voucher at a health facility. Two percent of women received a voucher or financial assistance to attend antenatal care, 2% received a voucher or financial assistance for delivery at a health facility, and 0.4% received a voucher or financial assistance for postpartum or postnatal care at a health facility.

Table D6.23: Voucher incentives for care-seeking for most recent live birth in the past two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Received a voucher or other form of financial assistance to attend antenatal care at a health facility	3	617	0.5	0.3	5	297	1.5	0.9
Received a voucher or other form of financial assistance to deliver at a health facility	11	557	3.7	2.0	14	278	2.0	0.9

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
No voucher	556	99.5	0.3	280	99.6	0.4
Yes, for woman's care	1	0.1	0.1	1	0.4	0.4
Yes, for infant's care	1	0.2	0.2	0	0.0	-
Yes, for both woman and infant	1	0.1	0.1	0	0.0	-
Don't know	1	-	-	1	-	-
Decline to respond	0	-	-	1	-	-

Some facilities that attend deliveries have a **casa materna** or maternal waiting home nearby to provide women who live far away a place to stay while they await delivery or while they recover and prepare to travel home with their infant. Table D6.24 displays how women have commonly used maternal waiting homes during their most recent pregnancy in the past two years. 28.3% of women in the second follow-up report using a maternal waiting home before giving birth and 54.2% of these women report receiving counseling while staying at a maternal waiting home. On average, women stayed at a maternal waiting home for two days and spent 0 Lempira.

Table D6.24: Use of maternal waiting homes for most recent live birth in the past two years, women 15-49 years of age

	Second Follow-Up 2017			
	n	N	%	SE
Heard of maternal waiting home	152	308	45.9	6.7
Among women who have heard of maternal waiting homes				
Used a maternal waiting home before giving birth	38	152	28.3	4.2
Among women who used maternal waiting homes				
Received counseling on health and parenting topics while at waiting home	18	35	54.2	14.9

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Second Follow-Up 2017							
Days spent in maternal home	36	0	0	1	2	4.8	30
Out-of-pocket cost to use maternal home, Lempira	37	1	0	0	0	10	1500

D7. Chapter 7: CHILD HEALTH

This chapter summarizes the health status of children aged 0-59 months whose caregivers participated in the SMI-Honduras Second Follow-up Household Survey. All data summarized in this chapter are based on the caregiver's report.

D7.1 Health status

The age and sex distribution of the de facto population of children aged 0-59 months participating in the caregiver interview module or the anthropometric measures in Honduras is shown in Figure D7.1 by six- or 12-month age groups.

Twenty percent of children surveyed at baseline and 18% of children surveyed at the second follow-up were under 1 year old at the time of the interview. The age distributions of female and male children are similar.

Figure D7.1: Age and sex of children aged 0-59 months in child health survey or anthropometric measures of the de facto population by six- to twelve-month age groups, unweighted

D7.1.1 Current health status

Table D7.1 shows the current health status of all children aged 0-59 months, as reported by their caregivers. The table includes the caregiver's evaluation of current health relative to health the previous year and the percentage of children who can easily perform daily activities. In the second follow-up, approximately 66.9% of children's health was considered by their caregiver to be "good," "very good," or "excellent," compared to 63.7% at baseline.

Relative to the past year, caregivers in the second follow-up evaluation reported that 34.9% of children's health was "about the same" in the second follow-up. While 59.1% of children's health had improved, 5.9% of children experienced reportedly worse health on the day of the interview, compared to last year. Ninety seven percent of children could "easily" perform their daily activities (e.g., playing and going to school) according to their caregivers. Three percent of children had some degree of difficulty performing these activities, 0% of children had a significant degree of difficulty performing these activities, and 0.4% of children were unable to complete daily activities, according to their caregivers.

Table D7.1: Current health status, among children aged 0-59 months

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Current health status						
Excellent	327	22.1	1.6	126	18.5	2.7
Very good	248	17.2	1.3	88	10.0	1.7
Good	348	24.4	1.5	307	38.4	2.8
Fair	463	32.0	1.5	217	29.6	2.0
Poor	61	4.4	0.8	31	3.6	1.2
Don't know	1	-	-	1	-	-
Decline to respond	3	-	-	0	-	-
Health status relative to a year ago						
Better	577	51.4	1.8	361	59.1	2.5
Worse	49	4.3	0.7	42	5.9	1.1
About the same	507	44.3	1.8	214	34.9	2.4
Don't know	2	-	-	1	-	-
Decline to respond	3	-	-	1	-	-
Ability to perform daily activities						
Easily	1334	93.1	0.8	740	96.8	0.7
With some difficulty	67	4.7	0.7	26	2.8	0.7
With much difficulty	4	0.3	0.2	1	0.0	-
Unable to do	29	2.0	0.5	3	0.4	0.3
Don't know	15	-	-	0	-	-
Decline to respond	2	-	-	0	-	-

D7.1.2 Recent illness

Caregivers were asked a series of questions about any illnesses or health problems that their children had in the two weeks preceding the interview. In the second follow-up survey, approximately 37% of children

were reported as sick during that time (Table D7.2). Of the 289 children who were recently ill, cough (30.7%), fever (28.3%), and diarrhea without blood (7.1%) were the most commonly specified complaints.

Table D7.2: Recent illness, among children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Child was sick in the last two weeks	576	1449	40.6	1.7	289	770	36.9	3.4

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Recent illness among children ill in the last 2 weeks						
Cough	190	33.3	2.5	84	30.7	3.4
Fever	184	31.9	2.4	94	28.3	3.9
Diarrhea without blood	51	9.0	1.3	23	7.1	2.0
Abdominal pain	7	1.4	0.5	3	2.0	1.8
Skin rash/infection	16	2.8	0.7	6	1.6	0.7
Vomiting	7	1.3	0.5	4	1.5	1.0
Asthma	13	2.5	0.7	2	1.0	0.7
Diarrhea with blood	6	1.1	0.4	2	0.8	0.8
Eye/ear infection	6	1.0	0.5	3	0.5	0.4
Measles	1	0.2	0.2	1	0.4	0.4
Difficulty urinating	0	0.0	-	1	0.4	0.4
Malaria	0	0.0	-	0	0.0	-
Tuberculosis	0	0.0	-	0	0.0	-
Bronchitis	6	0.9	0.5	0	0.0	-
Pneumonia	1	0.1	0.1	0	0.0	-
Anemia	2	0.4	0.3	0	0.0	-
Jaundice	0	0.0	-	0	0.0	-
Headache	1	0.3	0.3	0	0.0	-
Stroke	0	0.0	-	0	0.0	-
Diabetes	0	0.0	-	0	0.0	-
HIV/AIDS	0	0.0	-	0	0.0	-
Paralysis	2	0.3	0.2	0	0.0	-
Chest infection	0	0.0	-	0	0.0	-
Blood in urine	0	0.0	-	0	0.0	-
Swelling in legs, ankles, or feet	0	0.0	-	0	0.0	-
Other	82	13.6	2.0	66	25.9	2.5
Don't know	1	-	-	0	-	-
Decline to respond	0	-	-	0	-	-

D7.1.3 Utilization of health services for recent illness

Table D7.3 summarizes data regarding the utilization of health services among the 289 children who were sick in the two weeks preceding the interview. The table shows the percentage of children 0-59 months who were sick in the last two weeks for whom care was sought for recent illness and among these,

the percent distribution by type of medical facility where care was sought and whether the child was hospitalized.

In the second follow-up survey, care was sought for 48.9% of these cases. Care was typically sought at CESAMO (48%) or Private doctor's office (12%) facilities; some attended cESARs (11%). Only one child was hospitalized for their recent illness.

Table D7.3: Utilization of health services for recent illness in the last two weeks, among children 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Sought care for recent illness	325	576	56.5	2.7	155	289	48.9	3.7
Child was hospitalized for recent illness	7	109	5.6	2.1	1	52	2.3	2.1

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Type of medical facility where care was sought						
CESAMO	127	37.0	5.4	76	48.0	8.0
Private doctor's office	16	5.5	1.4	27	12.0	4.0
CESAR	88	29.5	6.2	12	11.0	5.2
Private health clinic	37	10.7	2.3	12	9.4	2.6
Pharmacy	16	4.7	1.3	12	9.1	2.8
Traditional healer	6	2.0	0.7	2	1.7	1.2
CMI	7	2.1	0.7	2	1.6	1.0
Public mobile clinic	1	0.4	0.4	2	0.9	0.9
Private mobile clinic	0	0.0	-	2	0.9	0.8
Public hospital	9	2.7	0.8	1	0.7	0.7
Private hospital	2	0.5	0.3	1	0.7	0.7
Community health worker	4	1.3	0.6	1	0.5	0.5
Other public health facility	2	0.6	0.6	0	0.0	-
Other private health facility	0	0.0	-	0	0.0	-
Other	10	3.0	1.1	5	3.3	1.6
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-

D7.2 Acute respiratory infection

Acute respiratory infection is a leading cause of morbidity and mortality among children. Early diagnosis and treatment with antibiotics can prevent deaths resulting from pneumonia, a common acute respiratory disease. The prevalence of acute respiratory infection was estimated by asking caregivers whether their children aged 0-59 months had been ill with a cough accompanied by short, rapid breathing in the two weeks preceding the interview. If the child had symptoms of an acute respiratory infection, the caregiver was asked about what was done to treat the symptoms and feeding practices during the illness.

D7.2.1 Prevalence of acute respiratory infection and fever

The prevalence of cough, suspected acute respiratory infection, and fever among children aged 0-59 months, as reported by their caregivers, is displayed in Table D7.4. In the second follow-up, 29% of children experienced cough, 13.5% had symptoms of an acute respiratory infection, and 21.4% had a fever in the two weeks preceding the interview.

Table D7.4: Prevalence of suspected acute respiratory infection and fever in the last two weeks, among children 0-59 months

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Child had cough in the last two weeks, by type						
No cough	1023	70.3	2.2	542	71.4	3.1
Cough without difficulty breathing	222	15.7	1.3	108	15.1	1.5
With difficulty breathing due to congested/runny nose	54	3.8	0.6	45	5.5	1.4
With difficulty breathing due to chest problem	104	7.7	0.9	41	5.0	1.1
With difficulty breathing due to chest problem and congested/runny nose	34	2.4	0.5	28	2.6	0.9
With difficulty breathing due to other reason	0	0.0	-	2	0.4	0.3
Don't know	12	-	-	4	-	-
Decline to respond	2	-	-	0	-	-

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Symptoms of acute respiratory infection in the last two weeks	197	1442	14.3	1.3	116	766	13.5	2.1
Fever in last two weeks	375	1449	26.7	1.8	177	767	21.4	2.3

D7.2.2 Utilization of health services for suspected acute respiratory infection

Forty four percent of children with symptoms of acute respiratory infection were taken for evaluation and/or treatment of their condition at the second follow-up (Table D7.5).

Table D7.5: Utilization of health services for suspected acute respiratory infection in the last two weeks, among children 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Sought care for suspected acute respiratory infection	303	528	57.2	2.7	137	280	44.4	3.9

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Type of medical facility where care was sought						
CESAMO	122	38.0	5.7	71	50.1	7.2
CESAR	84	30.4	6.8	11	11.5	5.5
Pharmacy	16	5.2	1.3	12	10.9	3.9
Private doctor's office	13	4.7	1.4	21	10.5	3.7
Private health clinic	30	9.1	2.2	10	8.9	2.9
CMI	8	2.9	1.0	2	1.8	1.1
Private mobile clinic	0	0.0	-	2	1.0	0.9
Traditional healer	6	2.1	0.9	1	1.0	1.1
Other public health facility	2	0.7	0.7	1	0.9	0.9
Public hospital	4	1.2	0.6	1	0.8	0.8
Private hospital	1	0.3	0.3	1	0.8	0.8
Public mobile clinic	1	0.4	0.4	1	0.1	0.1
Other private health facility	0	0.0	-	0	0.0	-
Community health worker	3	1.0	0.6	0	0.0	-
Other	13	4.1	1.5	3	1.7	1.2
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-

D7.2.3 Utilization of medications for suspected acute respiratory infection

Eighty four percent of children with symptoms of acute respiratory infection were given some type of medication for their condition during the second follow-up (Table D7.6). Fifty two percent of children were administered antibiotic syrups for a suspected acute respiratory infection. Acetaminophen (66.7%) and ibuprofen (7.1%) were also commonly administered. Twenty five percent of children received a treatment other than those listed.

Table D7.6: Utilization of medications for suspected acute respiratory infection in the last two weeks, among children 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Any treatment	474	527	89.6	1.7	246	280	84.5	3.2
Antibiotic injection	47	474	10.1	1.2	29	245	12.3	4.3
Antibiotic pill	43	474	8.7	1.6	14	245	7.5	2.3
Antibiotic syrup	290	474	61.3	2.8	131	245	52.1	3.0
Aspirin	12	474	2.7	0.6	9	245	3.8	2.4
Acetaminophen	314	474	65.2	2.8	172	245	66.7	3.3
Ibuprofen	54	474	12.0	2.2	18	245	7.1	2.0
Oral rehydration therapy	11	474	2.5	0.8	6	245	2.9	1.3
Other	92	474	20.0	1.8	59	246	24.9	2.9

D7.2.4 Feeding practices during suspected acute respiratory infection

Data on feeding practices during the recent episode of suspected acute respiratory infection are summarized in Table D7.7. The table shows the volume of fluids and the volume of solids given during the illness. At the second follow-up, only 34.4% of children were given more fluids than usual. In total, 30% of children were offered less fluid than usual (or none at all). Twenty nine percent of children were offered the same volume of solid food as usual during their illness. Approximately 69% of children were given less than the usual amount of solid food (or none at all).

Table D7.7: Feeding practices during suspected acute respiratory infection in the last two weeks, among children 0-59 months

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Volume of fluids (including breastmilk) given during illness						
No fluids	14	2.4	1.0	3	1.0	0.7
Much less	77	15.5	2.0	23	5.9	1.0
Somewhat less	182	34.8	2.9	71	23.0	3.5
About the same	216	40.8	2.9	100	35.6	3.9
More	36	6.5	1.3	83	34.4	4.1
Don't know	3	-	-	0	-	-
Decline to respond	0	-	-	0	-	-
Volume of solid foods given during illness						
No solids	10	2.0	0.5	22	7.5	2.2
Much less	98	20.1	2.1	41	14.3	3.2
Somewhat less	240	46.3	3.2	132	47.0	3.5
About the same	162	30.8	2.8	76	28.8	3.8
More	5	0.8	0.3	7	2.3	1.1
Don't know	12	-	-	1	-	-
Decline to respond	1	-	-	1	-	-

D7.3 Diarrhea

Dehydration caused by severe diarrhea in a major cause of morbidity and mortality among children. Exposure to diarrheal disease-causing agents is frequently a result of use of contaminated water and unhygienic practices related to food preparation and disposal of feces. The prevalence of diarrhea was estimated by asking caregivers whether their children aged 0-59 months had had diarrhea in the two weeks preceding the interview. If the child had had diarrhea, the caregiver was asked about treatment and feeding practices during the diarrheal episode.

D7.3.1 Prevalence

Table D7.8 shows the proportion of children aged 0-59 months with diarrhea in the two weeks preceding the interview, as reported by their caregivers (34% at the second follow-up). One percent of children had bloody diarrhea.

Table D7.8: Prevalence of diarrhea in the last two weeks, among children aged 0-59 months

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
No diarrhea	116	60.7	4.2	63	66	7.2
Diarrhea without blood	70	37.3	4.0	41	33	6.5
Diarrhea with blood	3	2.0	1.0	1	1	1.0
Don't know	14	-	-	5	-	-
Decline to respond	0	-	-	0	-	-

D7.3.2 Utilization of health services for diarrhea

Nearly half of children with diarrhea were taken for evaluation and/or treatment of their condition (Table D7.9). Care for these children was often sought in the public sector, although private health centers were visited by 3% of these cases at the second follow-up.

Table D7.9: Utilization of health services for diarrhea in the last two weeks, among children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Sought care for diarrhea	39	73	54	6.8	25	42	54.1	11.5

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Type of medical facility where care was sought						
CESAMO	14	36.4	7.1	13	68.3	13.6
Private health clinic	5	13.5	5.7	2	6.0	3.6
Pharmacy	2	4.5	3.1	1	6.0	6.0
CESAR	8	18.2	6.5	1	6.0	6.0
Traditional healer	1	2.9	2.8	1	5.5	5.9
Private hospital	1	2.1	2.2	1	4.9	5.3
Private doctor's office	4	10.9	4.5	6	3.2	2.8
Public hospital	0	0.0	-	0	0.0	-
Public mobile clinic	0	0.0	-	0	0.0	-
Other public health facility	1	2.6	2.5	0	0.0	-
Private mobile clinic	0	0.0	-	0	0.0	-
Other private health facility	0	0.0	-	0	0.0	-
Community health worker	1	2.9	2.5	0	0.0	-
CMI	1	3.7	3.7	0	0.0	-
Other	1	2.5	2.6	0	0.0	-
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-

D7.3.3 Utilization of treatments for diarrhea

A simple and effective response to dehydration caused by diarrhea is a prompt increase in the child's fluid intake through some form of oral rehydration therapy. Oral rehydration therapy may include the use of a solution prepared from commercially produced packets of powdered oral rehydration salts, commercially-produced bottled oral serums, or homemade fluids usually prepared from sugar, salt, and water. Other treatments, including zinc, may be administered as well.

Although care was sought in only 54.1% of diarrhea cases, 88% of cases were given some form of treatment at the second follow-up. Fluid made with powdered oral rehydration salts was the most common form oral rehydration therapy (43.7%). Thirteen percent of cases were treated with zinc syrup or pills. Nine percent of cases were treated with an antibiotic pill.

Table D7.10: Utilization of treatments for diarrhea during the last two weeks, among children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Any treatment	57	72	79.6	4.7	37	42	88.0	4.0
Fluids								
Fluid made with powdered oral rehydration salts	22	71	30.5	7.1	16	42	43.7	9.7
Bottled oral rehydration serum	23	71	31.2	7.8	21	42	43.6	8.9
Homemade fluid recommended by health authorities	24	71	33.7	5.0	7	42	20.2	7.8
Medications								
Antibiotic pill	11	72	13.8	4.6	4	42	8.9	4.8
Antidiarrheal pill	11	72	16.2	4.6	6	42	16.4	5.8
Zinc pill	1	72	1.6	1.5	4	41	12.8	7.7
Other type of pill	5	72	7.7	2.8	3	42	5.9	3.0
Unknown pill	1	72	1.4	1.5	0	42	0.0	-
Antibiotic injection	4	72	6.3	3.2	3	42	5.9	3.0
Non-antibiotic injection	1	72	1.3	1.3	0	42	0.0	-
Unknown injection	0	72	0.0	-	1	42	2.7	2.6
Intravenous therapy	0	72	0.0	-	0	42	0.0	-
Home remedy/herbal medicine	10	72	14.1	4.4	6	42	14.8	7.1
Antibiotic syrup	22	72	29.5	6.0	7	42	10.8	4.5
Antidiarrheal syrup	9	72	11.9	4.2	6	42	17.7	7.5
Zinc syrup	4	72	5.7	2.7	0	42	0.0	-
Other syrup	1	72	1.9	1.8	3	42	6.3	4.8
Unknown syrup	5	72	7.1	2.8	1	42	3.6	3.6
Other treatment	8	72	10.5	4.3	9	42	25.3	8.5

D7.3.4 Feeding practices during diarrhea

Caregivers are encouraged to continue feeding children normally when they suffer from diarrheal diseases and to increase the fluids they are given. These practices help to prevent dehydration and minimize the adverse consequences of diarrhea on the child's nutritional status.

Data on feeding practices during the recent diarrheal episode are summarized in Table D7.11. The table shows the volume of fluids and the volume of solids given during the illness. Only 36.7% of children were given more fluids than usual in the second follow-up survey. Approximately 44% of children were offered less fluid than usual (or none at all). Seven percent of children were offered the same volume of solid food as usual during their illness. Approximately 83% of children were given less than the usual amount of solid food (or none at all).

Table D7.11: Feeding practices among children aged 0-59 months who had diarrhea in the last two weeks

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Volume of fluids (including breastmilk) given during illness						
No fluids	4	5.6	3.3	2	6.4	3.7
Much less	8	11.1	4.2	4	13.5	5.9
Somewhat less	23	32.0	5.5	12	23.6	8.7
About the same	30	40.7	4.8	10	19.8	6.3
More	8	10.6	3.0	14	36.7	8.9
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-
Volume of solid foods given during illness						
No solids	4	5.1	2.6	6	10.5	4.5
Much less	16	22.6	5.7	10	31.9	8.4
Somewhat less	28	39.9	5.5	18	40.9	9.1
About the same	24	31.2	6.2	5	7.0	3.1
More	1	1.2	1.2	3	9.6	4.5
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-

D7.4 Immunization against common childhood illnesses

Information on immunization coverage was collected for all children aged 0-59 months whose caregivers participated in the survey. Both caregiver's report and review of vaccination card (if available) were used to determine coverage. A vaccination card was available for review for 675 children at the second follow-up (87.7% of the sample, unweighted). In Table D7.12, coverage is estimated by vaccine type to include all children with full compliance for age as specified in the national immunization scheme at the time of the survey, according to either an affirmative response from the caregiver that the immunization was received, or a mark that the immunization was received on the vaccination card (for children with a vaccination card available for review at the time of the interview). Children too young to have received a specific vaccine are counted as covered in order to maintain a comparable all-ages sample across vaccine types.

Table D7.12: Immunization against common childhood illnesses, children aged 0-59 months, according to caretaker recall and vaccination card

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
BCG vaccine (tuberculosis)	1309	1342	97.6	0.5	720	725	99.4	0.3
Hepatitis B vaccine	1057	1339	79.1	2.4	648	716	91.0	1.6
Polio vaccine	892	1346	66.5	2.1	545	726	76.9	2.7
Pentavalent vaccine (DPT, HepB, HiB)	1176	1345	87.2	1.1	666	726	93.8	1.1
Rotavirus vaccine	938	1338	69.8	1.7	641	719	90.4	2.2
Pneumococcal conjugate vaccine	1324	1421	92.8	1.0	644	716	90.6	2.0
Measles, mumps, and rubella (MMR) vaccine	1259	1353	93.2	1.0	724	735	98.8	0.4
Diphtheria, tetanus, and pertussis (DPT) vaccine	1053	1362	76.7	1.8	648	732	89.6	1.1

*Pneumonia vaccine was added to national vaccine scheme two years before baseline measurement, so children 24 months of age and older at baseline are compliant without receiving pneumonia vaccine.

In Table D7.13, coverage estimates based on recall are summarized for the full sample, and coverage estimates based on vaccination card data are summarized among the subset with a vaccination card available for review. When considering only caregivers' recall, only 8.9% of children aged 0-59 months were fully immunized for age at the second follow-up survey, reflecting many "Don't know" or "Decline" responses that call into question the reliability and validity of the caregiver recall data. Caregivers were able to definitively answer the entire vaccine recall section for only 261 children at the second follow-up. Immunization coverage for children 0-59 months based only upon the vaccine card is 62.1%, and when combined with recall-based information, the estimate of full vaccination for age among children 0-59 months is 55.3%.

Table D7.13: Full immunization compliance for age, children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
According to recall + card	513	1317	38.5	2.1	421	703	62.1	4.1
According to vaccine card	345	1435	23.4	1.5	396	770	55.3	4.3
According to caregiver's recall	31	667	4.7	1.4	19	261	8.9	4.4

*Pneumonia vaccine was added to national vaccine scheme two years before baseline measurement, so children 24 months of age and older at baseline are compliant without receiving pneumonia vaccine.

D7.5 Deworming treatment

Administration of deworming treatment every six months has been shown to reduce the prevalence of anemia in children. Only 34.5% of children aged 12-59 months received at least two doses of deworming treatment in the year preceding the second follow-up interview (Table D7.14).

Table D7.14: Deworming treatment among children aged 12-59 months

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
No deworming	318	27.6	1.8	143	22.9	2.3
One dose	371	32.4	1.6	268	42.6	2.3
Two or more doses	440	40.0	1.7	203	34.5	2.8
Don't know	6	-	-	4	-	-
Decline to respond	2	-	-	0	-	-

D8. Chapter 8: INFANT AND YOUNG CHILDREN FEEDING PRACTICES

This chapter summarizes the feeding practices of infants and children aged 0-59 months whose caregivers participated in the SMI-Honduras Household Survey. All data summarized in this chapter are based on the caregiver's report.

D8.1 Breastfeeding

D8.1.1 Exclusive breastfeeding

Coverage of exclusive breastfeeding is defined as the percentage of infants born in the six months prior to the survey who received only breast milk during the previous day. This information is obtained through a 24-hour dietary recall in which the caregiver indicates what the child consumed during the previous day and night. In Honduras during the second follow-up, the sample includes 55 children who are under 6 months of age, and 14 of those children have sufficiently complete dietary recall information to determine whether they are exclusively breastfed. Table D8.1 shows that 23.6% of children under 6 months of age are exclusively breastfed.

D8.1.2 Continued breastfeeding at 1 year

Coverage of continued breastfeeding at 1 year is defined as the percentage of children 12-15 months old who received breast milk during the previous day according to caregiver's dietary recall. In Honduras during the second follow-up, the sample includes 41 children who are between 12 and 15 months of age, and 23 of those children have adequate responses to determine their breastfeeding status. Table D8.1 shows that 59.8% of children continue to receive breast milk at 1 year.

Table D8.1: Breastfeeding among children

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Exclusive breastfeeding among children <6 months	51	133	39.3	5.8	14	55	23.6	7.8
Continued breastfeeding at one year among children 12-15 months	73	94	78.8	4.5	23	41	59.8	9.8

D8.2 Acceptable diet

D8.2.1 Introduction of solid, semi-solid, or soft foods

Coverage of appropriate introduction of solid foods is measured as the percentage of infants 6-8 months of age who received solid or semi-soft foods during the previous day according to caregiver's dietary recall. In Honduras during the second follow-up, the sample includes 35 children who are 6-8 months of age, and 31 of those children have sufficiently complete dietary recall information. Table D8.2 shows that 93.2% of children consumed solid or semi-soft foods.

D8.2.2 Dietary diversity

Coverage of minimum dietary diversity is measured as the percentage of children 6-23 months of age who received foods from at least four food groups during the previous day according to caregiver's dietary recall. In Honduras during the second follow-up, the sample includes 228 children who are 6-23 months of age, and 180 of those children have sufficiently complete dietary recall information to determine dietary diversity. Table D8.2 shows that 79.8% of children achieved the minimum dietary diversity during the previous day.

D8.2.3 Meal frequency

Coverage of minimum meal frequency is measured as the percentage of children 6-23 months of age who received solid foods at least the minimum number of times the previous day, based on age and breastfeeding status. For breastfed children, the minimum is two times for children 6-8 months of age and three times for children 9-23 months of age. For non-breastfed children, the minimum number is four times for all children 6-23 months of age. This information is obtained through caregiver's dietary recall. In Honduras during the second follow-up, the sample includes 228 children who are 6-23 months of age, and 166 of those children have sufficiently complete dietary recall information to determine meal frequency. Table D8.2 shows that 74.3% of children achieved the minimum meal frequency during the previous day.

D8.2.4 Minimum acceptable diet

Coverage of minimum acceptable diet is measured for children 6-23 months of age. For breastfed children to meet the minimum acceptable diet they must have had at least the minimum dietary diversity and the minimum meal frequency during the previous day. For non-breastfed children to meet the minimum acceptable diet they must have had at least two milk feedings, as well as at least the minimum dietary diversity (not including milk feedings) and the minimum meal frequency during the previous day. This information is obtained through caregiver's dietary recall. In Honduras during the second follow-up, the sample includes 228 children who are 6-23 months of age, and 128 of those children have sufficiently complete dietary recall information to determine minimum acceptable diet. Table D8.2 shows that 55.9% of children achieved the minimum acceptable diet during the previous day.

D8.2.5 Consumption of iron-rich or iron-fortified foods

Consumption of iron-rich foods is measured as the percentage of children 6-23 months of age who receive an iron-rich food (e.g., liver, beef, or fish), an iron supplement, or a fortified food that is specially designed for infants and young children, or a food fortified in the home with a product that included iron during the previous day. This information is obtained through caregiver's dietary recall. In Honduras during the second follow-up, the sample includes 228 children who are 6-23 months of age and 159 of those children have sufficiently complete dietary recall information to determine iron consumption. Table D8.2 shows that 66.8% of children consumed an iron-rich food during the previous day.

Table D8.2: Acceptable diet among children 6-23 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Introduction of solid foods among children 6-8 months	68	79	85.6	4.0	31	35	93.2	4.4
Minimum dietary diversity among children 6-23 months	240	455	51.7	2.9	180	228	79.8	3.6
Minimum meal frequency among children 6-23 months	264	426	62.8	3.1	166	227	74.3	4.1
Consumption of iron-rich foods among children 6-23 months	243	455	52.6	2.8	159	228	66.8	5.0
Minimum acceptable diet among children 6-23 months	144	442	32.4	2.9	128	227	55.9	4.2

D8.3 Micronutrient supplementation

D8.3.1 Vitamin A

Interviewers asked the caregiver if their child received a dose of vitamin A in the last six months. Table D8.3 shows that of the 770 sampled children 0-59 months of age in the second follow-up, 71.8% received a dose of vitamin A in the last six months.

D8.3.2 Iron

Interviewers showed the caregiver photos of common types of bottles, powders, or syrups and asked if their child received iron pills, powder, or syrup in the last day. Table D8.3 shows that of the 770 children 0-59 months of age in the second follow-up sample, 24.6% received a dose of iron in the last day.

Table D8.3: Vitamin A and Iron consumption among children 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Vitamin A in the last six months	953	1391	68.9	1.9	547	746	71.8	2.9
Iron supplement the previous day	291	1441	20.2	1.3	179	764	24.6	2.6

D8.3.3 Packets of micronutrients

Interviewers showed the caregiver a card with packets of micronutrients (chispitas) and asked how many packets their child received from a health facility and consumed in the last six months. Children are intended to take 60 consecutive daily doses of micronutrient powder in each of three rounds, beginning at age 6, 12, and 18 months, with an adequate consumption considered to be 50 packets. Table D8.4 shows that among children 6-23 months of age sampled in the second follow-up, 96% received no packets of micronutrients from a health facility in the last six months.

Table D8.4: Micronutrient powders among children 6-23 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Received any micronutrient packets from health facility in the last six months	87	450	20.3	3.2	8	226	4.0	1.8
Consumed any micronutrient packets	86	449	20.2	3.2	6	224	3.3	1.5
Consumed adequate dose (>=50 packets) of micronutrient powders	0	449	0.0	-	4	224	2.4	1.4

* Identical questions were asked in baseline and second follow-up surveys, but the second follow-up interview included photos of the micronutrient products. The baseline survey predated the intervention, so it is possible that questions about receipt and consumption were interpreted by caregivers to include different types of micronutrient supplements at baseline.

D9. CHAPTER 9: NUTRITIONAL STATUS IN CHILDREN

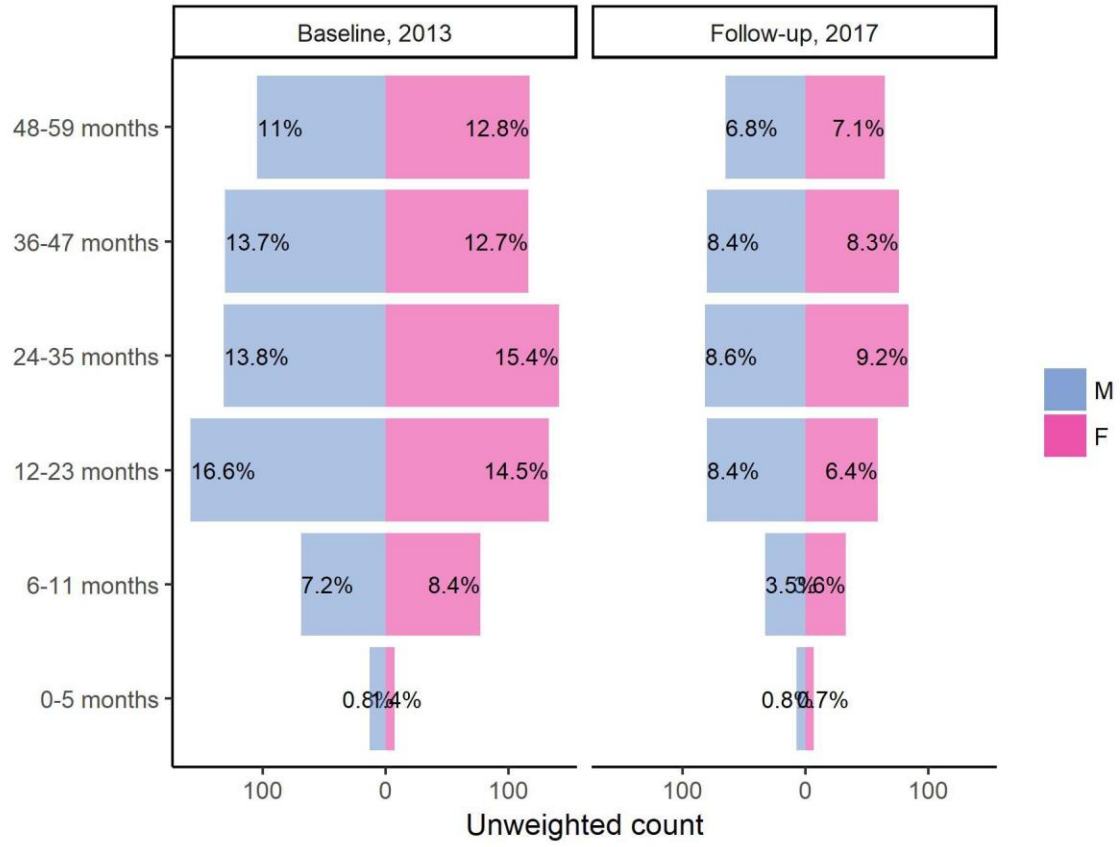
The nutritional status of children aged 0-59 months is an important outcome measure of children's health. The SMI-Honduras Second Follow-up Household Survey collected data on the nutritional status of children by measuring the height and weight of all children aged 0-59 months residing in surveyed households, using standard procedures. Hemoglobin levels of these children were also assessed in the field, using a portable HemoCue™ machine, and these data were used to estimate anemia prevalence. As described in Chapter 1, medically trained personnel who were specifically trained to standardize the anthropometric and hemoglobin measurements conducted the testing. This evaluation allows identification of subgroups of the child population that are at increased risk of malnutrition. The parents of anemic children (hemoglobin level <11.0 g/dL, with altitude adjustment) were informed of this result in real-time and were referred for treatment to the appropriate health service.

Three indicators were calculated using the weight and height data – weight-for-age, height-for-age, and weight-for-height. For this report, indicators of the children's nutritional status were calculated using growth standards published by the World Health Organization (WHO) in 2006. The growth standards were generated using data collected in the WHO Multicenter Growth Reference Study. The findings of the study, whose sample included children in six countries (Brazil, Ghana, India, Norway, Oman, and the United States), describe how children should grow under optimal conditions. As such, the WHO Child Growth Standards can be used to assess children all over the world, regardless of ethnicity, social and economic influences, and feeding practices. The three indicators are expressed in standard deviation units from the median in the Multicenter Growth Reference Study.

A total of 770 children aged 0-59 months participated in the SMI-Honduras second follow-up. In practice, 748 of these children underwent the physical measurement module. Height and weight data are presented for 747 of these children (99.9%, unweighted). Six hundred ninety nine children 6-59 months of age were eligible for the anemia test. Hemoglobin was measured in 657 children (94%, unweighted, of children 6-59 months of age). Parental consent was refused for 39 children, one were not measured because anthropometrists could not obtain a sufficient capillary blood sample or any sample at all, and two cases were not tested for other reasons (for example, because the child did not cooperate). The age and sex distribution of children participating in the physical measurement module is displayed in Figure D9.1 and Figure D9.2.

Figure D9.1: Height and weight measured: Age and sex distribution of children measured, children 0-59 months of age of the de facto population

Figure D9.2: Hemoglobin measured: Age and sex distribution of children measured, children 0-59 months of age of the de facto population



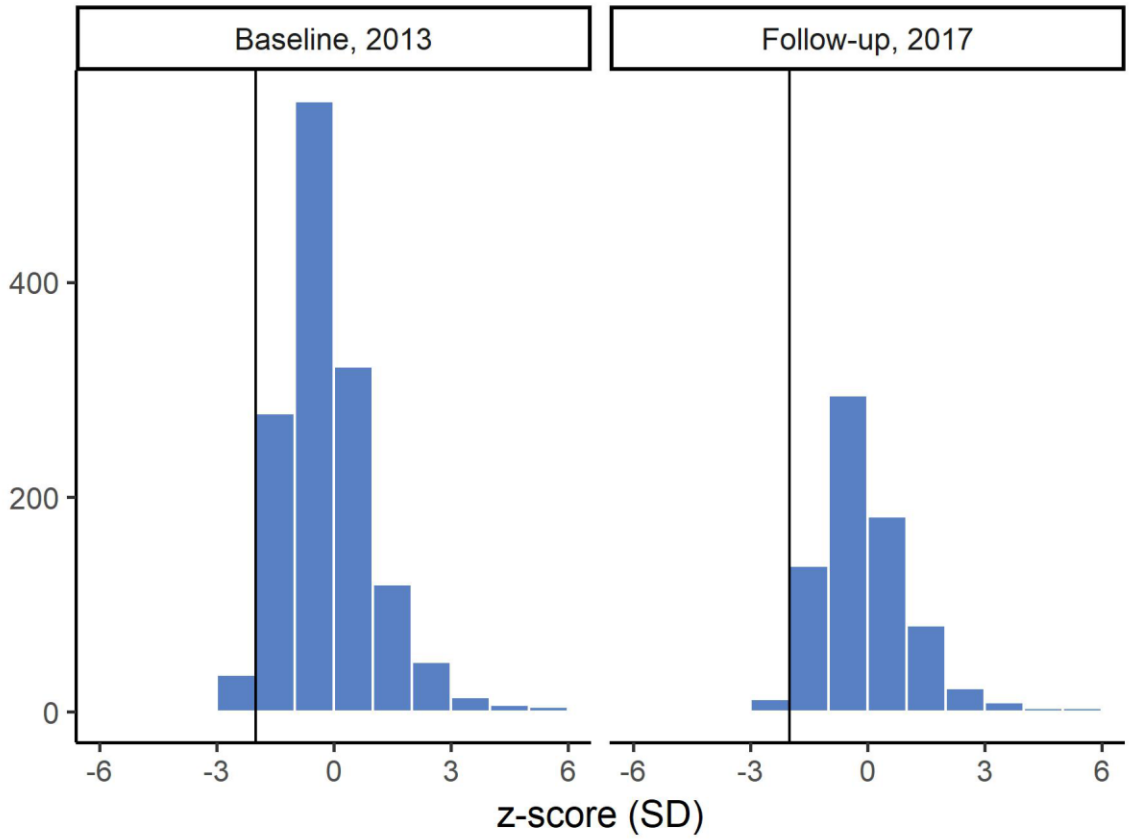
D9.1 Weight-for-Age

Weight-for-age is a good overall indicator of a population's general health, as it reflects the effects of both acute and chronic undernutrition. The weight-for-age indicator does not distinguish between chronic malnutrition (stunting) and acute malnutrition (wasting); a child can be underweight because of stunting, wasting, or both. Children with weight-for-age below minus two standard deviations (-2 SD) are classified as underweight. Children with weight-for-age below minus three standard deviations (-3 SD) are considered severely underweight.

D9.1.1 Unweighted distribution of weight-for-age z-scores

Figure D9.3 shows the distribution of weight-for-age z-scores among all children aged 0-59 months whose measurements were taken. The vertical black lines in the figure denote minus two standard deviations – children to the left of the line are classified as underweight.

Figure D9.3: Distribution of weight-for-age z-scores among children 0-59 months, unweighted



D9.1.2 Prevalence of underweight

As shown in Table D9.1, 7.3% of children aged 0-59 months in the second follow-up are underweight (have low weight-for-age) and 0.9% are severely underweight. The proportion of underweight children is highest (8.8%) in the age groups 24 to 59 months and lowest (2.8%) among those under 6 months. Female children (5.9%) are less likely to be underweight than male children (8.6%).

Table D9.1: Prevalence of underweight in children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Prevalence of underweight in children 0-59 months, by sex and age (< -2 SD)								
Male	49	715	7.0	1.3	28	385	8.6	1.8
Female	29	687	4.8	0.7	19	363	5.9	2.0
0-5 months	3	135	2.7	1.6	2	49	2.8	2.2
6-11 months	3	148	2.8	1.7	5	79	7.7	2.9
12-23 months	9	298	3.2	1.0	6	143	3.8	1.7
24-59 months	63	821	8.0	1.0	34	477	8.8	2.0
0-59 months	78	1402	6.0	0.7	47	748	7.3	1.6
6-23 months	12	446	3.1	0.9	11	222	5.1	1.8
Prevalence of severe underweight in children 0-59 months, by sex and age (< -3 SD)								
Male	9	715	1.4	0.5	5	385	1.2	0.6
Female	7	687	1.1	0.4	2	363	0.7	0.5
0-5 months	0	135	0.0	-	0	49	0.0	-
6-11 months	1	148	0.7	0.7	2	79	1.6	1.4
12-23 months	0	298	0.0	-	1	143	0.1	0.1
24-59 months	15	821	2.0	0.5	4	477	1.2	0.7
0-59 months	16	1402	1.3	0.3	7	748	0.9	0.5
6-23 months	1	446	0.2	0.2	3	222	0.6	0.5
Prevalence of high weight for age in children 0-59 months, by sex and age (> 2 SD)								
Male	33	715	4.8	0.8	21	385	5.3	1.3
Female	37	687	4.7	0.8	14	363	4.1	1.0
0-5 months	35	135	25.9	4.0	13	49	30.3	9.7
6-11 months	12	148	8.3	2.1	7	79	6.9	2.6
12-23 months	11	298	3.3	1.0	5	143	3.1	1.4
24-59 months	12	821	1.4	0.5	10	477	2.0	0.6
0-59 months	70	1402	4.8	0.6	35	748	4.7	0.9
6-23 months	23	446	4.9	0.9	12	222	4.4	1.6

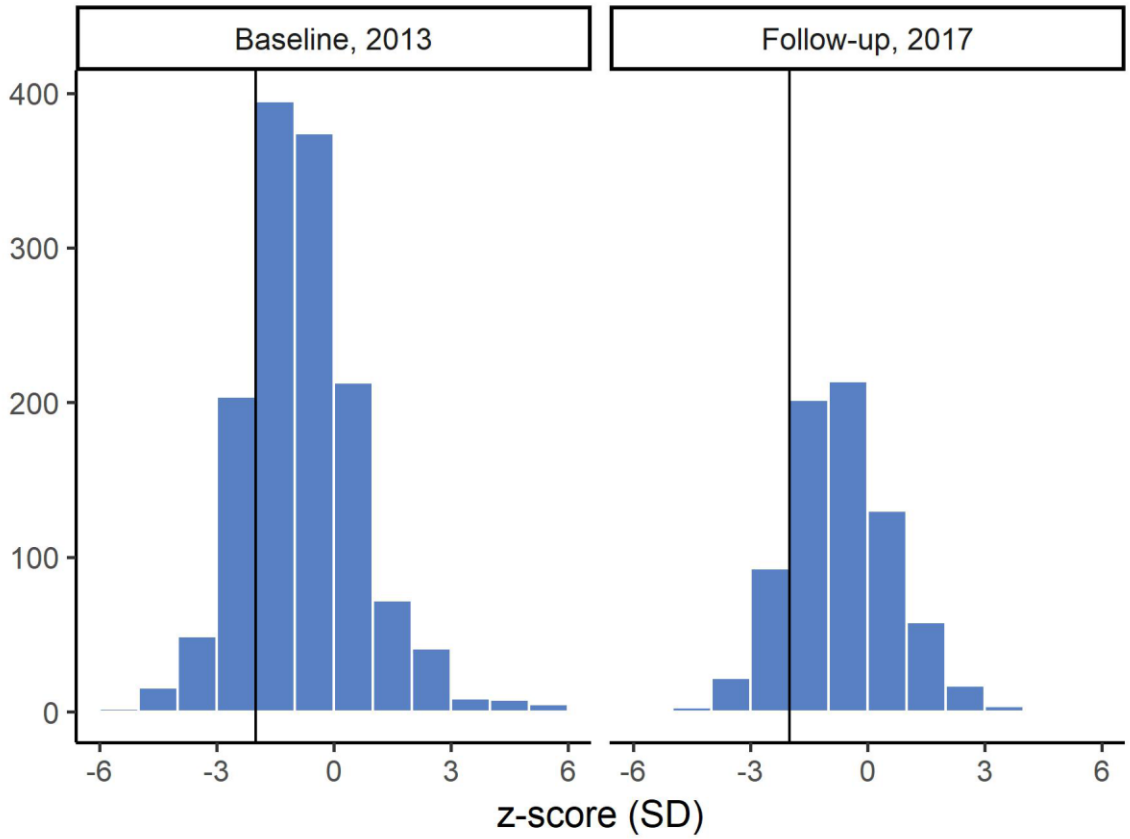
D9.2 Height-for-Age

Height-for-age is an indicator of linear growth retardation and cumulative growth deficits in children. Children whose height-for-age z-score is below minus two standard deviations (-2 SD) from the median of the WHO reference population are considered short for their age (stunted) or chronically malnourished. Children who are below minus three standard deviations (-3 SD) are considered severely stunted. Stunting reflects failure to receive adequate nutrition over a long period of time and is affected by recurrent and chronic illness. Height-for-age, therefore, represents the long-term effects of malnutrition in a population and is not sensitive to recent, short-term changes in dietary intake.

D9.2.1 Distribution of height-for-age z-scores

Figure D9.4 presents the distribution of height-for-age z-scores among all children aged 0-59 months whose measurements were taken. The vertical black lines in the figure denotes minus two standard deviations – children to the left of the line are classified as stunted.

Figure D9.4: Distribution of height-for-age z-scores among children 0-59 months, unweighted



D9.2.2 Prevalence of stunting

Table D9.2 presents the prevalence of stunting in children aged 0-59 months as measured by height-for-age. In the second follow-up, 17.3% of children under age 5 are stunted and 3.4% are severely stunted. Analysis of the indicator by age group shows that stunting is highest (19.8%) in children 24-59 months and lowest (0.2%) in children aged 0-5 months. Children 12-23 months old have the highest proportion of severely stunted children (1.2%) while the youngest age group (0-5 months) has the lowest proportion (0%). A higher proportion (18%) of male children is stunted compared with the proportion of female children (16.6%).

Table D9.2: Prevalence of stunting in children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Prevalence of stunting in children 0-59 months, by sex and age (< -2 SD)								
Male	161	715	23.6	2.3	67	385	18.0	3.0
Female	117	686	18.5	2.2	55	362	16.6	3.4
0-5 months	1	135	0.9	0.9	1	49	0.2	0.2
6-11 months	12	148	8.1	2.3	6	79	7.1	3.7
12-23 months	51	297	18.0	2.6	29	143	20.6	5.2
24-59 months	214	821	27.6	2.6	86	476	19.8	4.2
0-59 months	278	1401	21.1	1.9	122	747	17.3	2.9
6-23 months	63	445	14.8	2.0	35	222	16.0	3.5
Prevalence of severe stunting in children 0-59 months, by sex and age (< -3 SD)								
Male	46	715	6.7	1.1	15	385	4.0	1.7
Female	29	686	4.8	0.9	9	362	2.9	1.6
0-5 months	1	135	0.9	0.9	0	49	0.0	-
6-11 months	1	148	0.7	0.7	2	79	1.6	1.4
12-23 months	11	297	3.4	1.0	3	143	1.2	1.0
24-59 months	62	821	8.3	1.2	19	476	4.8	2.2
0-59 months	75	1401	5.8	0.8	24	747	3.4	1.6
6-23 months	12	445	2.5	0.7	5	222	1.3	0.8

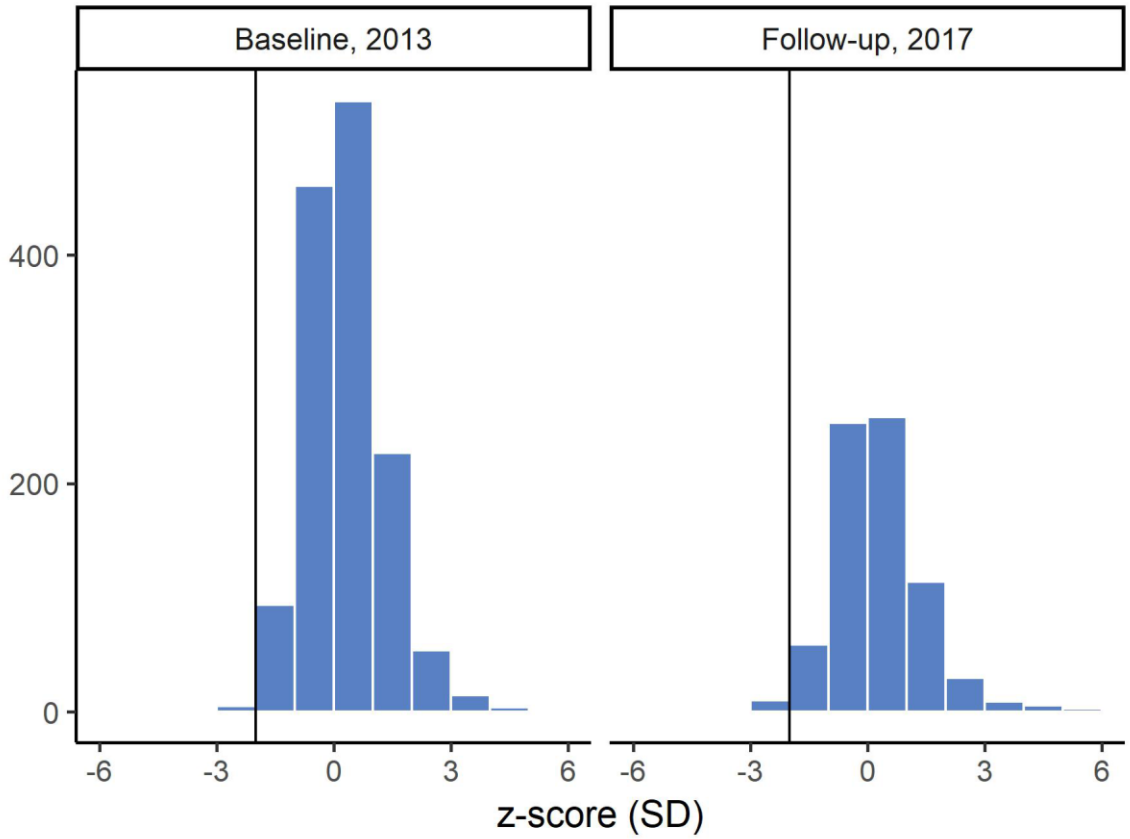
D9.3 Weight-for-Height

The weight-for-height indicator measures body mass in relation to body height or length and describes current nutritional status. Children with z-scores below minus two standard deviations (-2 SD) are considered thin (wasted) or acutely malnourished. Wasting represents the failure to receive adequate nutrition in the period immediately preceding the survey and may be the result of inadequate food intake or a recent episode of illness causing loss of weight and the onset of malnutrition. Children with a weight-for-height index below minus three standard deviations (-3 SD) are considered severely wasted. This weight-for-height indicator also provides data on over-weight and obesity. Children more than two standard deviations (+2 SD) above the median weight-for-height are considered overweight or obese.

D9.3.1 Distribution of weight-for-height z-scores

Figure D9.5 shows the distribution of weight-for-height z-scores among all children aged 0-59 months whose measurements were taken. The vertical black lines in the figure denote minus two standard deviations – children to the left of the line are classified as wasted.

Figure D9.5: Distribution of weight-for-height z-scores among children 0-59 months, unweighted



D9.4 Prevalence of Wasting

Table D9.3 shows the breakdown of nutritional status of children aged 0-59 months as measured by weight-for-height by age groups and sex. In the second follow-up, 3.3% of children are wasted and 1% of children are severely wasted. Analysis of the indicator by age group shows that wasting is highest (3.2%) in children 12-23 months old and lowest (8.6%) in children aged 6-11 months. Male children are more likely to be wasted than female children (3.9% to 2.7%). Male children are slightly more likely to be severely wasted (1.2%) than females (0.7%).

Overweight and obesity affect a greater proportion of children in SMI areas Honduras than wasting. In this sample, 5.4% of children are overweight or obese (weight-for-height more than +2 SD). The coexistence of both growth retardation and obesity reveals the burden of malnutrition in Honduras.

Table D9.3: Prevalence of underweight in children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Prevalence of wasting in children 0-59 months, by sex and age (< -2 SD)								
Male	14	714	2.1	0.6	11	385	3.9	1.9
Female	3	686	0.7	0.4	10	362	2.7	1.1
0-5 months	2	135	1.8	1.3	3	49	7.0	3.0
6-11 months	2	148	1.9	1.4	4	79	8.6	3.5
12-23 months	8	297	3.0	1.1	5	143	3.2	1.7
24-59 months	5	820	0.7	0.4	9	476	2.1	1.0
0-59 months	17	1400	1.4	0.4	21	747	3.3	0.9
6-23 months	10	445	2.6	0.8	9	222	5.1	2.0
Prevalence of severe wasting in children 0-59 months, by sex and age (< -3 SD)								
Male	4	714	0.7	0.4	4	385	1.2	0.8
Female	0	686	0.0	-	2	362	0.7	0.5
0-5 months	1	135	1.3	1.3	2	49	5.0	2.9
6-11 months	0	148	0.0	-	1	79	1.9	1.8
12-23 months	1	297	0.3	0.3	2	143	1.4	1.3
24-59 months	2	820	0.3	0.2	1	476	0.2	0.2
0-59 months	4	1400	0.3	0.2	6	747	1.0	0.4
6-23 months	1	445	0.2	0.2	3	222	1.6	1.0
Prevalence of overweight in children 0-59 months, by sex and age (> 2 SD)								
Male	30	714	4.3	0.7	27	385	5.5	1.3
Female	37	686	5.4	1.0	18	362	5.2	1.6
0-5 months	12	135	8.0	2.5	6	49	14.8	7.5
6-11 months	10	148	7.4	2.2	6	79	8.0	3.1
12-23 months	12	297	4.2	1.2	5	143	2.3	1.2
24-59 months	33	820	4.1	0.7	28	476	4.8	1.4
0-59 months	67	1400	4.9	0.7	45	747	5.4	1.2
6-23 months	22	445	5.3	1.0	11	222	4.2	1.2

D9.5 Anemia

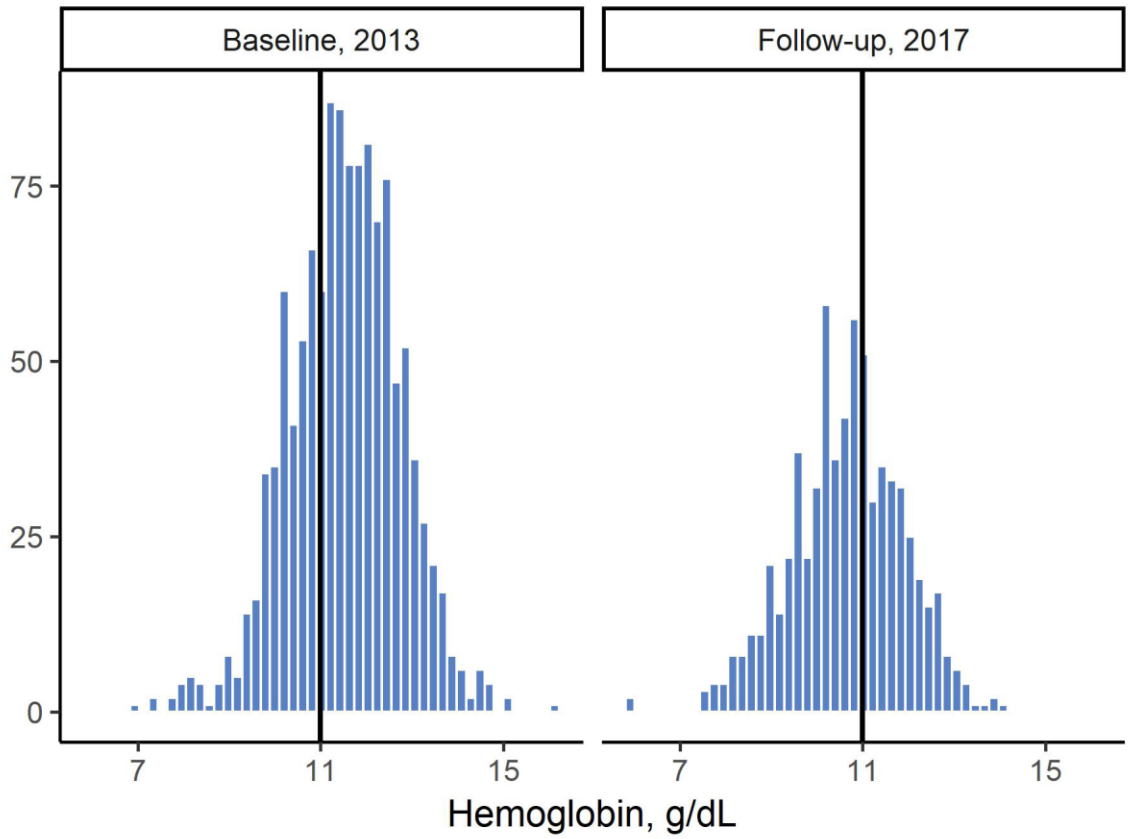
Anemia is a condition characterized by low concentration of hemoglobin in the blood. Hemoglobin is necessary for transporting oxygen to tissues and organs in the body. The reduction in oxygen available to organs and tissues when hemoglobin levels are low is responsible for most of the symptoms experienced by anemic persons. The consequences of anemia include general body weakness, frequent tiredness, and lowered resistance to disease. It is of concern in children because anemia is associated with impaired mental and motor development. Overall, morbidity and mortality risks increase for individuals suffering from anemia.

Common causes of anemia include inadequate intake of iron, folate, vitamin B12, or other nutrients. This form of anemia is commonly referred to as iron-deficiency anemia and is the most widespread form of anemia in the world. Anemia can also be the result of thalassemia, sickle cell disease, malaria, or intestinal worm infestation.

D9.5.1 Distribution of hemoglobin values

Figure D9.6 shows the distribution of hemoglobin values (in g/dL) among children 0-59 months of age. The vertical black lines in the figure denote a hemoglobin concentration of 11.0 g/dL – children to the left of the line are classified as anemic.

Figure D9.6: Distribution of altitude-adjusted hemoglobin values among children 0-59 months, unweighted



D9.5.2 Prevalence of anemia

Levels of anemia were classified as severe (<7.0 g/dL) and any (<11.0 g/dL) based on the hemoglobin concentration in the blood. The cutpoints for anemia are adjusted (raised) in settings where altitude is more than 1,000 meters above sea level, to account for lower oxygen partial pressure, a reduction in oxygen saturation of blood, and an increase in red blood cell production. Although some regions of Honduras are mountainous and well above 1,000 meters, the majority of the population resides at lower levels. The highest elevation of a surveyed household at the second follow-up was 1,546 meters above sea level; 7.1% of children (unweighted) lived above 1,000 meters. Correction for elevation was applied to anemia diagnosis where data collectors measured altitude over 1,000m (using a handheld GPS device).

Children whose hemoglobin levels are below 11 g/dL are considered anemic, and children who have hemoglobin levels below 7 g/dL are considered severely anemic. Table D9.4 indicates that 57.9% of children under age 5 in Honduras are anemic. Overall, the anemia prevalence is mostly mild to moderate (57.4%), with only 0.5% of children under 5 years presenting as severely anemic. Anemia prevalence is highest among children aged 0-5 months (65.9%) compared with the other children. More than 74.1% of all children aged 6-23 months, our targeted population for anemia intervention, were found to be anemic.

Table D9.4: Prevalence of anemia, children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Prevalence of anemia in children 0-59 months, by sex and age								
Male	196	609	30.3	2.9	221	347	63.4	2.7
Female	159	591	26.9	2.7	170	324	52.1	2.7
0-5 months	9	20	40.7	11.0	10	14	65.9	9.6
6-11 months	76	146	50.4	5.9	53	66	81.7	4.6
12-23 months	109	292	35.6	3.4	97	139	70.7	3.7
24-59 months	161	742	21.3	2.4	231	452	50.7	3.2
0-59 months	355	1200	28.6	2.4	391	671	57.9	2.2
6-23 months	185	438	40.5	3.5	150	205	74.1	3.0
Prevalence of severe anemia in children 0-59 months, by sex and age								
Male	0	609	0.0	-	0	347	0.0	-
Female	0	591	0.0	-	2	324	1.0	0.7
0-5 months	0	20	0.0	-	0	14	0.0	-
6-11 months	0	146	0.0	-	0	66	0.0	-
12-23 months	0	292	0.0	-	2	139	2.4	1.6
24-59 months	0	742	0.0	-	0	452	0.0	-
0-59 months	0	1200	0.0	-	2	671	0.5	0.3
6-23 months	0	438	0.0	-	2	205	1.6	1.1

D10. CHAPTER 10: SMI HOUSEHOLD INDICATORS

Table D10.1: Performance of payment indicators, SMI-Honduras Second Follow-up Survey

		Baseline 2013				Second Follow-Up 2017			
	Indicator	n	N	%	SE	n	N	%	SE
4010	Women (age 15-49) delivered in CMI/hospital with skilled attendant in their most recent pregnancy in the last two years	461	647	69.4	3.1	239	310	77.9	3.7
4030	Women (age 15-49) who received postpartum care within 7 days with skilled personnel in their most recent pregnancy in the last two years	347	643	51.7	3.0	230	310	73.0	5.3
NA	Children (6-23 months) consumed at least 50 doses of micronutrients in the last 6 months	0	449	0.0	-	4	224	2.4	1.4

Table D10.2: Performance of monitoring indicators, SMI-Honduras Follow-up Survey

		Baseline 2013				Second Follow-Up 2017			
	Indicator	n	N	%	SE	n	N	%	SE
2010	Women (age 15-49) currently using (or whose partner is using) a modern method of family planning	617	892	63.6	4.0	411	540	74.7	3.8
1080	Women aged 15-49 with a live birth in the last year	274	1690	10.9	0.8	114	975	7.7	1.2
1090	Women aged 15-19 with a live birth in the last year	55	311	13.6	2.5	25	187	7.3	2.4
2020	Women (age 15-49) who did not wish to become pregnant and who were not using/not have access to family planning methods (temporary and permanent)	275	892	36.4	4.0	129	540	25.3	3.8
2030	Women (age 15-49) who report having stopped using a method of family planning during the previous year	23	709	4.9	1.4	19	456	4.7	1.8
4110	Women (age 15-49) with a birth in the last two years who can recognize at least 5 danger signs in newborns	123	548	22.8	3.3	93	252	33.3	5.9
6010	Women 15-49 who report having any illness in the past two weeks	413	1688	24.4	1.8	257	973	27.5	2.7
6020	Women (age 15-49) who report having any illness in the past two weeks but did not seek health care	254	413	55.7	3.1	169	257	64.3	4.6
6130	Women who reported satisfaction with health care services at their most recent visit to a health facility	807	870	93.5	1.1	575	609	95.6	0.9
6140	Women who reported satisfaction with cleanliness of the facility at their most recent visit to a health facility	520	873	59.4	3.0	475	611	77.4	3.2
6150	Women who reported satisfaction with competence of the medical personnel at their most recent visit to a health facility	818	852	96.6	0.8	589	606	98.0	0.8
6160	Women who reported they were treated with respect at their most recent visit to a health facility	526	872	61.1	2.9	480	611	79.2	3.1
3010	Women (age 15-49) who received at least one antenatal care visit by skilled personnel in their most recent pregnancy in the last two years	572	647	88.3	2.0	292	310	93.2	2.2
3020	Women (age 15-49) who received at least four antenatal care visits by skilled personnel in their most recent pregnancy in the last two years	494	641	76.7	2.4	271	309	86.3	2.5
4020	Women (age 15-49) who received postpartum care by skilled personnel within the first 48 hours in their most recent pregnancy in the last two years	290	643	43.3	2.7	195	310	60.8	6.4
4035	Women (age 15-49) who received postpartum care by skilled personnel between 7 and 42 days after delivery in their most recent pregnancy in the last two years	116	643	18.0	2.6	111	310	38.8	5.2

(continued)

		Baseline 2013				Second Follow-Up 2017			
	Indicator	n	N	%	SE	n	N	%	SE
4040	Women (age 15-49) who received postpartum care by skilled personnel within 24 hours after delivery, a second check before 7 days, and a third check between 7 and 42 days after delivery in their most recent pregnancy in the last two years	16	643	2.1	0.8	18	310	6.1	2.1
4100	Infants receiving neonatal care by skilled personnel in a health facility within 48 hours of birth in the last two years	265	629	40.3	2.7	149	270	50.9	8.4
4101	Infants receiving neonatal care by skilled personnel in a health facility within 24 hours of birth in the last two years	210	629	31.7	2.6	112	270	37.2	6.4
5050	Children born in the last two years who were breastfed within one hour after birth	540	691	78.2	2.7	218	316	71.4	3.4
5060	Children 0-59 months who received ORS and zinc in the last episode of diarrhea in the past two weeks	4	72	6.1	2.8	0	41	0.0	-
4145	Children (0-59 months) with pneumonia symptoms who received antibiotics	112	138	80.5	3.3	49	69	68.5	9.3
NA	Children (0-59 months) fully vaccinated for age, according to vaccine card and recall	513	1317	38.5	2.1	421	703	62.1	4.1
5010	Children 12-59 months who received 2 doses of deworming in the last year	440	1129	40.0	1.7	203	614	34.5	2.8
5040	Children 0-5 months who were exclusively breastfed on the previous day	51	133	39.3	5.8	14	55	23.6	7.8
5075	Children 6-23 months who consumed at least 60 packets of micronutrients (complete dose) in the last 6 months	0	449	0.0	-	4	224	2.4	1.4
5080	Children 12-15 months who were breastfed on the previous day	73	94	78.8	4.5	23	41	59.8	9.8
5090	Children 6-8 months who received solid or semi-solid food on the previous day	68	79	85.6	4.0	31	35	93.2	4.4
5100	Children 6-23 months who received foods from 4 or more food groups during the previous day	240	455	51.7	2.9	180	228	79.8	3.6
5110	Children 6-23 months breastfed or complimentary feeding who received solid, semi-solid, or soft foods the minimum number of times or more during the previous day	264	426	62.8	3.1	166	227	74.3	4.1
5120	Children 6-23 months who received the minimum acceptable diet (apart from breastmilk) during the previous day	144	442	32.4	2.9	128	227	55.9	4.2
5130	Children 6-23 months who received iron-rich or iron-fortified foods during the previous day	243	455	52.6	2.8	159	228	66.8	5.0
6030	Children (0-59 months) who had any illness in the past two weeks, according to report of mother or caregiver	576	1449	40.6	1.7	289	770	36.9	3.4
6040	Children (0-59 months) who had any illness in the past two weeks but did not seek health care, according to report of mother or caregiver	6	568	0.9	0.4	1	287	0.4	0.4
1060	Children 6-23 months with hemoglobin <110g/L	185	438	40.5	3.5	150	205	74.1	3.0
1070	Children 0-59 months with height < -2 SD of the mean of the reference population for age	278	1401	21.1	1.9	122	747	17.3	2.9

		Baseline 2013			Second Follow-Up 2017		
	Indicator	N	mean	SE	N	mean	SE
6090	Average out-of-pocket household itemized health expenditure for the last month (L)	1425	254.0	74.6	754	424.8	90.0
6100	Average household itemized expenditure for the last month (L)	1442	4425.9	212.9	756	6105.8	516.9
6080	Average travel time to nearest health facility (min)	1629	46.3	4.6	941	32.7	4.6
6085	Average distance to nearest health facility (km)	442	3.1	0.5	684	3.1	0.5
6120	Average wait time at most recent visit to a health facility (min)	852	93.3	7.5	592	96.2	9.5
6082	Average travel time to delivery location for most recent birth in the last two years (min)	536	138.4	11.5	276	145.7	22.8

APPENDIX E. INTERVENTION AND COMPARISON AREAS

E1 CHAPTER 1

E1.1 Report structure

The chapters in the main body of the report present characteristics of the surveyed SMI-Honduras sample in intervention areas only. Each table is presented for comparison areas only in Appendix D, and pooled intervention and comparison areas in Appendix E. Most tables take one of three types. Tabulations of select-only-one question types are mutually exclusive, so the proportions sum to 100%. Counts are shown for non-response ("Don't know" or "Decline to respond" recorded), but these cases are always excluded from the denominator.

Tabulations of select-all-that-apply question types do not have mutually-exclusive categories, as respondents can report more than one option, and thus proportions do not sum to 100%. The table shows affirmative cases (n) and non-missing cases (N). Non-response is the difference between non-missing cases (N) and the total sample eligible for that section of the questionnaire, indicated at the start of the chapter. Where statistics are reported for subpopulations, the size of the subpopulation is reported in the same table or the preceding table for straightforward comparison.

Tabulations of continuous variables, where respondents were requested to provide a numeric response, present the range and quartiles (25th percentile, median, 75th percentile) in order to illustrate the distribution of responses across the sample. Counts of non-response are listed in the table and excluded from the count of non-missing cases (N).

E2 CHAPTER 2: CHARACTERISTICS OF HOUSEHOLDS

This chapter provides a descriptive summary of the basic demographic, socioeconomic, and environmental characteristics of the households sampled for the SMI-Honduras Baseline and Second Follow-up Household Survey.

E2.1 Characteristics of Participating Households

A total of 2,439 households in the Honduras second follow-up completed the household characteristics questionnaire. In the baseline, 2,970 completed the survey. The remainder of this chapter is dedicated to a summary of the basic demographic, socioeconomic, and environmental characteristics of the households completing the household characteristics questionnaire.

E2.2 Age and Sex Composition, SMI Census

The unweighted distribution of the de facto household population in the surveyed households in the SMI-Honduras household census by five-year age groups and by sex is shown for baseline (Figure E2.1) and second follow-up (Figure E2.2). Honduras has a larger proportion of its population in the younger age groups than in the older age groups. Figure E2.2 indicates that in the second follow-up, just under 35% of the population in the Second Follow-up is under age 15 years, more than half (60%) of the population is in the economically productive age range (15-64), and the remaining 6% is age 65 and above.

Figure E2.1: Age and sex of census sample, unweighted percent distribution of de facto household population by five-year age groups, baseline survey

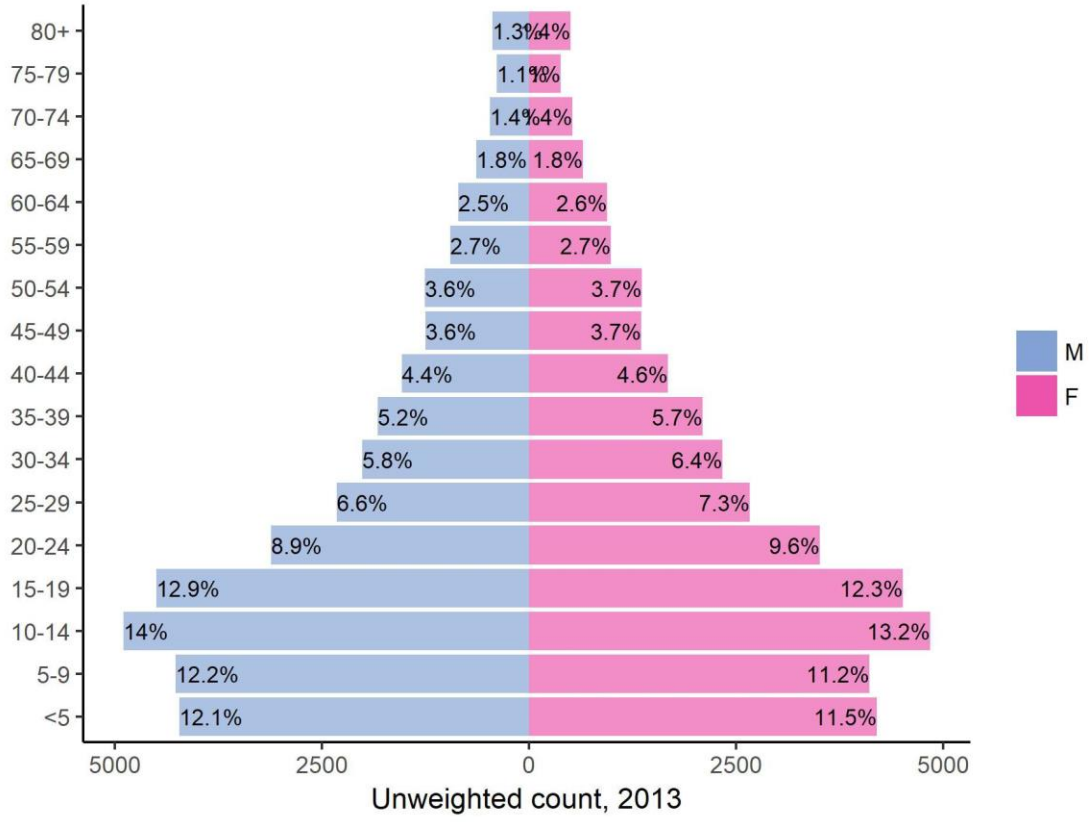
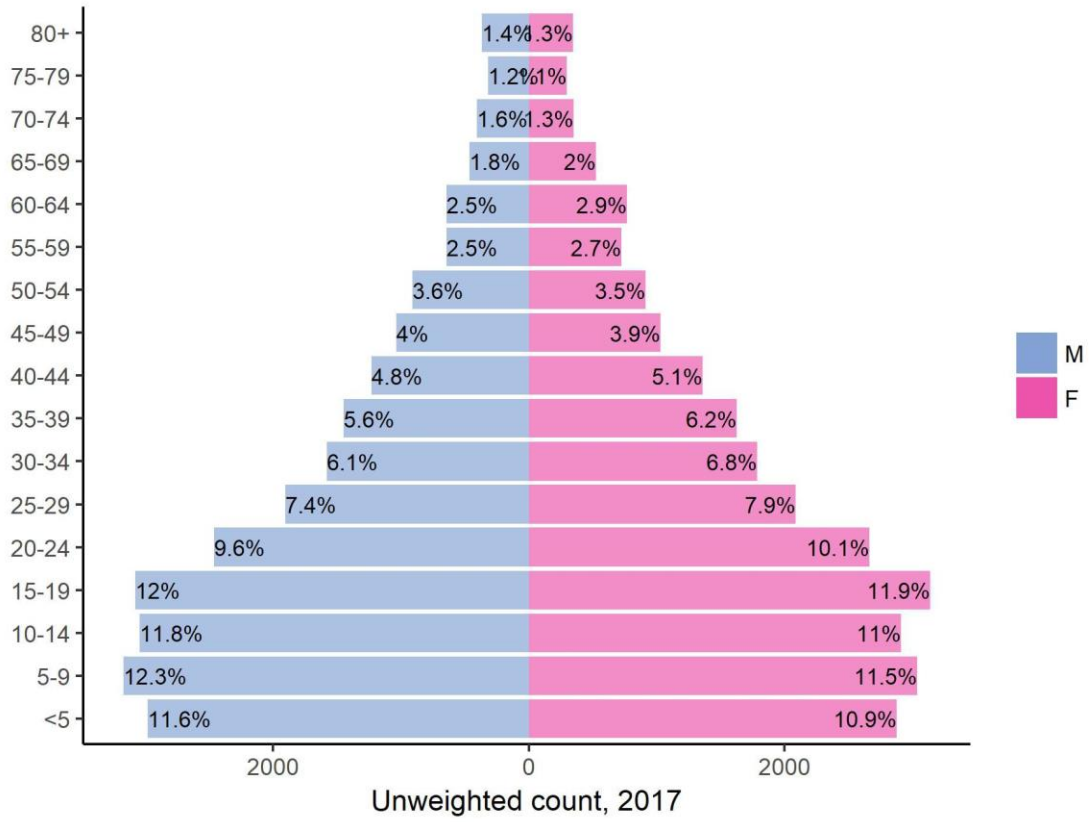


Figure E2.2: Age and sex of census sample, unweighted percent distribution of de facto household population by five-year age groups, follow-up survey



E2.3 Household Characteristics, SMI Household Survey

The number of households, women and children in the sample are displayed in Table E2.1; and the percent distribution of households by head of household, number of usual members, and marital status are shown in Table E2.2.

Seventy five percent of households in Honduras identify as dual-headed in the second follow-up. Males are the head of the household in 5.8% of surveyed households in Honduras, with females as the head of household in the remaining 19.2%. The median household size in Honduras is five members, with another 15% of households having six or more members.

Table E2.1: SMI household survey sample sizes: number of total households, women 15-49 years of age, and children 0-59 months

	Baseline 2013	Second Follow-Up 2017
Households	2970	2439
Women	3580	3099
Children	3143	2492

Table E2.2: Household characteristics, SMI household sample

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Head of household						
Dual-headed household	2320	78.5	1.1	1826	75.0	1.3
Single head, female	550	18.3	1.0	459	19.2	1.1
Single head, male	100	3.3	0.3	154	5.8	0.7

Dual-headed households are those where (a) two individuals were identified as "head" by the respondent or (b) both the person identified as "head" and his or her spouse or partner are household members

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Number of usual household members	2970	0	1	4	5	7	16
Second follow-up 2017							
Number of usual household members	2439	0	1	4	5	6	17

E2.4 Drinking Water Access and Treatment

E2.4.1 Sanitation facilities and waste disposal

A household's source of drinking water is an important determinant of the health status of household members. Contaminated drinking water can spread waterborne diseases, such as diarrhea or dysentery. Piped water, protected wells, and protected springs are expected to be relatively free of these diseases; whereas other sources like unprotected wells, rainwater, or surface water are more likely to carry disease-causing agents.

The percent distribution of households by source of drinking water, location of water source, and information about sanitation facilities is shown in Table E2.3. The majority of surveyed households (69.3%) have water piped to dwelling, and 30.7% of households have to go outside their home or yard to a water source.

Many households (37%) use a pour flush toilet and 36.3% of households use a flush toilet. Ten percent of households report having no toilet, compared to 15.5% at baseline.

Table E2.3: Household water source and sanitation facilities

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Household water source						
Piped to dwelling	2402	80.6	2.1	1706	69.3	2.7
Piped to yard/plot	162	5.7	0.8	440	19.6	2.5
Protected dug well	75	2.6	0.6	92	3.3	0.9
Unprotected dug well	54	1.9	0.5	52	2.1	0.5
Bottled water	46	1.2	0.4	56	2.0	0.7
Protected spring	13	0.4	0.1	19	0.6	0.2
Unprotected spring	27	0.9	0.2	14	0.5	0.2
Surface water	37	1.3	0.3	7	0.5	0.3
Rainwater collection	0	0.0	-	7	0.4	0.1
Tubewell/borehole	64	2.1	0.7	9	0.3	0.2
Water jug	11	0.4	0.1	6	0.2	0.1
Public tap/standpipe	8	0.3	0.2	4	0.1	0.1
Tanker truck	2	0.0	-	0	0.0	-
Cart with small tank/drum	0	0.0	-	0	0.0	-
Other	69	2.4	0.4	27	1.1	0.3
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-
Time it takes to retrieve water (min)						
Water on premises	2710	91.2	1.3	2303	95.4	0.9
Less than 30 minutes	216	7.6	1.1	112	4.2	0.8
30 minutes or longer	34	1.2	0.3	16	0.4	0.3
Don't know	9	-	-	8	-	-
Decline to respond	1	-	-	0	-	-
Sanitation facilities						
Pour flush toilet	1191	41.5	1.8	866	37.0	2.5
Flush toilet	913	28.7	2.2	900	36.3	3.2
Pit latrine	396	12.8	1.5	360	14.1	1.9
No toilet	429	15.5	1.4	248	10.1	1.7
Dry toilet	24	0.9	0.3	31	0.9	0.2
Other	15	0.5	0.2	32	1.6	0.4
Don't know	1	-	-	1	-	-
Decline to respond	1	-	-	1	-	-

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Shared toilet/facilities	218	2524	9.1	0.7	206	2156	9.1	0.8

E2.4.2 Cooking fuel sources

Cooking fuel source and the location for cooking food are included in Table E2.4. The percentage of households with a separate kitchen is also shown. The two most commonly reported cooking fuel sources used in households during the second follow-up are wood (84.7%) and gas tank (15%). Among those

households with non-missing responses as to what cooking fuel sources they use, 72.3% report normally cooking food in the house, 15.2% normally cook food in a separate building, and 12.5% normally cook food outdoors. Seventy six percent of households have a separate kitchen.

Table E2.4: Cooking fuel source and cooking location

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Wood	2509	2970	85.4	1.7	2046	2439	84.7	2.8
Gas tank	341	2970	10.3	1.4	371	2439	15.0	2.5
Electricity	506	2970	16.4	1.5	241	2439	8.8	1.2
Straw/twigs/grass	1	2970	0.0	-	20	2439	0.8	0.3
Coal	14	2970	0.5	0.1	6	2439	0.2	0.1
Agricultural crops	0	2970	0.0	-	0	2439	0.0	-
No food cooked at home	1	2970	0.0	-	1	2439	0.0	-
Other	2	2970	0.0	-	1	2439	0.1	0.1

*categories not mutually exclusive (select all that apply)

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Location for cooking food, if cooking fuel source reported						
Inside house	2114	71.2	1.7	1844	72.3	2.1
In a separate building	401	13.8	1.2	319	15.2	1.5
Outdoors	447	14.8	1.2	276	12.5	1.0
Other	4	0.1	0.1	0	0.0	-
Don't know	0	-	-	0	-	-
Decline to respond	1	-	-	0	-	-

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Separate kitchen, if cooking fuel source reported and food cooked in the home	1547	2109	73.1	1.7	1400	1844	75.5	2.2

E2.4.3 Household wealth

The median number of bedrooms per household is less than two (Table E2.5). Fourteen percent of households in the second follow-up own agricultural land and 16.4% of households rent agricultural land (Table E2.6).

The availability of durable consumer goods is a good indicator of a household's socioeconomic status. Table E2.6 shows the availability of selected consumer goods by household. The large majority of households (79.2%) have electricity, and the most commonly owned items are mobile phone (78.9%), television (59.8%), and refrigerator (44.8%). Many households (26.2%) own a bicycle and 14.6% own a motorcycle/scooter.

Table E2.5: Number of bedrooms per household

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Number of bedrooms	2966	3	0	1	2	2	7
Second follow-up 2017							
Number of bedrooms	2439	0	0	1	2	2	7

Table E2.6: Household assets

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Household assets								
Electricity	2320	2969	77.4	2.8	1960	2439	79.2	3.6
Mobile phone	2311	2970	76.2	1.6	1911	2438	78.9	2.3
Television	1854	2970	60.2	2.5	1484	2439	59.8	3.5
Refrigerator	1302	2969	41.6	2.3	1084	2438	44.8	3.3
Radio	1733	2970	58.6	1.7	1067	2439	42.4	2.5
Sound system	1019	2970	32.0	1.8	651	2439	26.7	2.1
Watch	791	2968	25.3	1.3	534	2439	21.8	1.5
Bank account	401	2933	12.7	1.0	408	2424	17.4	1.5
Computer	181	2969	5.2	0.6	133	2435	5.1	0.8
Washing machine	112	2969	3.2	0.6	125	2438	4.7	0.9
Guitar	117	2969	3.7	0.4	88	2438	3.8	0.4
Landline phone	103	2968	2.6	0.5	40	2433	1.2	0.3
Transportation assets								
Bicycle	819	2968	26.4	1.7	562	2438	26.2	2.7
Motorcycle/scooter	228	2968	7.3	0.7	358	2439	14.6	1.4
Car	305	2968	9.6	0.8	239	2439	9.6	1.1
Truck	23	2968	0.8	0.2	20	2438	0.7	0.2
Animal cart	15	2969	0.5	0.1	8	2439	0.2	0.1
Agricultural assets: Livestock ownership								
Chickens	1813	2969	62.0	2.5	1502	2438	62.4	2.9
Horses, donkeys, or mules	387	2968	13.2	1.3	274	2439	11.4	1.7
Pigs	379	2969	12.8	1.4	258	2438	10.5	1.5
Cattle	254	2966	8.4	0.9	161	2438	6.0	0.8
Sheep or goats	11	2968	0.3	0.1	11	2439	0.5	0.2

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Agricultural assets: Own or rent agricultural land						
No agricultural land	1878	62.4	2.5	1659	68.1	2.7
Owns agricultural land	620	22.1	1.9	333	14.4	2.1
Rents agricultural land	437	15.0	1.4	418	16.4	1.8
Shared/community-held land	12	0.5	0.2	27	1.0	0.4
Don't know	18	-	-	2	-	-
Decline to respond	5	-	-	0	-	-

E2.5 Household expenditure

E2.5.1 Total expenditures by type

Households are surveyed about the amount of money spent over the last month. After reporting total household expenditures, households are then asked how much was spent on specific categories (e.g., food, housing, education, and medical care) over the last four weeks. Table E2.7 shows the itemized monthly expenditure per person living in the household summarized by expenditure quintile. All data are presented in current Lempira (L). Itemized expenditure information was sufficiently complete to report for 2268 households at the second follow-up. The lowest quintile in the study area spent less than 432 L per person over the last month in the second follow-up.

Table E2.8 shows the budget share, defined as the weighted average expenditure on each category across a quintile divided by the weighted average total itemized household expenditure in the same quintile. Table E2.8 shows that the poorest 20% of households in the study area spend 78.3% of their monthly expenditure on food, on average. In comparison, the wealthiest households spend 53.2% on food. The poorest households spent 1.5% of their expenditure on medical care, while the wealthiest spent 12%.

Table E2.7: Total itemized per- capita expenditure quintiles, Honduras Lempira

	N	DK/DTR	p20	p40	p60	p80
Baseline 2013						
Per capita monthly household expenditure, current LCU	2657	4	305	480	725	1125
Second follow-up 2017						
Per capita monthly household expenditure, current LCU	2268	2	432	685	981	1588

Table E2.8: Itemized household expenditure by total household budget share

	Bottom quintile	2nd quintile	3rd quintile	4th quintile	Top quintile
Baseline 2013					
Food	80.5	78.5	74.0	69.3	59.3
Alcoholic beverages and tobacco	0.5	0.9	0.8	0.6	0.9
Education expenses	4.8	3.8	3.5	3.7	2.8
Furniture and domestic appliances	0.3	0.4	0.4	0.7	1.8
Recreation	0.0	0.1	0.1	0.1	0.2
Housing and utilities	4.4	4.6	5.7	6.8	7.3
Clothing and shoes	2.9	4.0	6.6	7.3	7.0
Transportation	2.5	3.4	3.7	3.8	5.1
Communication	2.2	2.5	2.1	2.5	2.2
Out-of-pocket medical expenses	1.7	1.7	3.1	4.7	11.3
Social security premiums	0.0	0.0	0.0	0.1	0.0
Private insurance premiums	0.0	0.0	0.0	0.0	0.0
Other costs to access health care	0.2	0.1	0.1	0.3	2.2
Second Follow-Up 2017					
Food	78.3	73.2	72.0	63.9	53.2
Alcoholic beverages and tobacco	0.6	1.3	0.6	0.7	0.4
Education expenses	5.9	6.0	5.2	5.0	5.3
Furniture and domestic appliances	0.5	0.1	0.3	0.8	2.8
Recreation	0.1	0.1	0.1	0.3	0.9
Housing and utilities	7.8	8.2	9.2	10.3	10.9
Clothing and shoes	1.6	4.0	4.8	7.4	6.0
Transportation	1.9	2.7	2.9	4.3	5.8
Communication	1.8	1.9	2.0	2.3	2.3
Out-of-pocket medical expenses	1.5	2.5	2.8	5.0	12.0
Social security premiums	0.0	0.0	0.1	0.1	0.2
Private insurance premiums	0.0	0.0	0.0	0.0	0.1
Other costs to access health care	0.0	0.0	0.0	0.0	0.1

E2.5.2 Health expenditures

Of the 2268 households with expenditure data at the second follow-up, 517 reported having health expenditures in the last four weeks. Table E2.9 shows health expenditure by type among households reporting non-zero out-of-pocket health expenditure. Very few households had spending in each category.

Table E2.9: Out-of-pocket medical expenditures by type, last four weeks, Honduras Lempira

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Care that required overnight stay in hospital/clinic	624	2	0	0	0	0	50000
Medications prescribed by health personnel	623	3	0	0	0	500	27000
Care by health professionals not requiring overnight stay	624	2	0	0	0	0	25000
Other costs associated with overnight stay in hospital/clinic	624	2	0	0	0	0	10000
Care or non-prescription medications from pharmacist	624	2	0	0	0	0	9000
Diagnostic and laboratory tests, X-rays, blood tests	623	3	0	0	0	0	7000
Dentists	625	1	0	0	0	0	4000
Other health care products or services	624	2	0	0	0	0	2000
Health products (glasses, hearing aids, prosthetics, etc.)	625	1	0	0	0	0	1500
Care by traditional/alternative healers/birth attendants	625	1	0	0	0	0	600
Second Follow-Up 2017							
Care that required overnight stay in hospital/clinic	517	1	0	0	0	0	7000
Medications prescribed by health personnel	516	2	0	0	89	700	7000
Care by health professionals not requiring overnight stay	514	4	0	0	0	0	50000
Other costs associated with overnight stay in hospital/clinic	518	0	0	0	0	0	20000
Care or non-prescription medications from pharmacist	518	0	0	0	0	100	6000
Diagnostic and laboratory tests, X-rays, blood tests	514	4	0	0	0	0	10000
Dentists	516	2	0	0	0	0	7000
Other health care products or services	518	0	0	0	0	0	8000
Health products (glasses, hearing aids, prosthetics, etc.)	518	0	0	0	0	0	2500
Care by traditional/alternative healers/birth attendants	517	1	0	0	0	0	3500

E2.5.3 Source of health expenditure financing

Of the 2268 households with expenditure data at the second follow-up, 194 reported that members of the household went to a hospital and stayed overnight at least once during the last 12 months and paid for expenses associated with the overnight stays. The maximum paid for a hospital stay was 7000 L.

Table E2.10 shows the source and amount of financing for medical expenditures for overnight hospital stays. No single funding source was used by more than about 25% of households with hospital stays.

Table E2.10: Health care financing by source, last 12 months, Honduras Lempira

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Remittances from family or friends abroad	344	0	0	0	0	0	110000
Money from relatives or friends outside the household	344	0	0	0	0	0	1e+05
Items sold	343	1	0	0	0	0	75000
Any household member's current income	341	3	0	0	0	1000	70000
Savings	342	2	0	0	0	0	42000
Loan from a source other than family or friends	344	0	0	0	0	0	35000
Conditional cash transfer programs	344	0	0	0	0	0	33000
Social security payments	343	1	0	0	0	0	7000
Property sold	344	0	0	0	0	0	6000
Reducing other household spending	341	3	0	0	0	0	5000
Other source	343	1	0	0	0	0	3000
Political donations or grants	344	0	0	0	0	0	500
Health insurance plan payment/reimbursement	343	1	0	0	0	0	0
Second Follow-Up 2017							
Remittances from family or friends abroad	194	3	0	0	0	0	30000
Money from relatives or friends outside the household	194	3	0	0	0	0	2e+05
Items sold	194	3	0	0	0	0	62000
Any household member's current income	194	3	0	0	0	0	32000
Savings	194	3	0	0	0	1494.9	5e+05
Loan from a source other than family or friends	195	2	0	0	0	703.9	2e+05
Conditional cash transfer programs	194	3	0	0	0	0	12000
Social security payments	194	3	0	0	0	0	5000
Property sold	194	3	0	0	0	0	50000
Reducing other household spending	194	3	0	0	0	0	2500
Other source	194	3	0	0	0	0	8000
Political donations or grants	194	3	0	0	0	0	2000
Health insurance plan payment/reimbursement	194	3	0	0	0	0	5000

E3 CHAPTER 3: GENERAL CHARACTERISTICS OF RESPONDENTS

This chapter summarizes the demographic characteristics, socioeconomic status, and health status of women of reproductive age (15-49 years) participating in the SMI-Honduras second follow-up household survey.

E3.1 Demographic Characteristics

E3.1.1 Age, marital status, relation to head of household

The age distribution of the de facto population of women of reproductive age participating in the women's health or pregnancy interviews in Honduras is shown in Figure E3.1 by five-year age groups. About 60% of all women participating in the second follow-up SMI-Honduras household survey were younger than 30 years of age, 27% were between the ages of 30 and 39, and 13% were between the ages of 40 and 49. While 24% of women reported being married and 45% being partnered, 28% indicated they were never married. Twenty one percent of women were reported at the SMI-Honduras census to be the head of household, 29.4% to be the spouse of the head of the household, and 26.3% to be the biological child of the head of the household.

Figure E3.1: Age of respondents, unweighted

One woman who participated in the baseline interview was excluded because she was unable to provide her age or an estimate of her age.

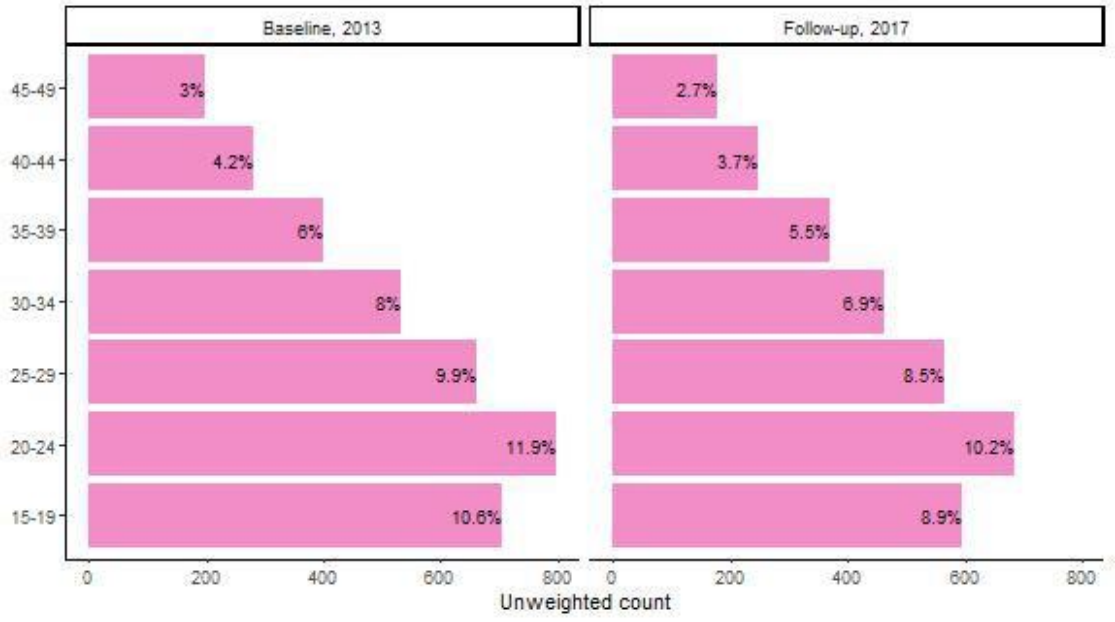


Table E3.1: Demographic characteristics of respondents

	Baseline 2013		Second Follow-Up 2017	
	n	%	n	%
Marital status				
Single	1134	31.7	909	29.3
Married	1007	28.1	729	23.5
Civil union/partnered	1316	36.8	1338	43.2
Divorced	5	0.1	4	0.1
Separated	81	2.3	94	3.0
Widowed	36	1.0	25	0.8
Other	1	0.0	0	0.0
Don't know	0	0.0	0	0.0
Decline to respond	0	0.0	0	0.0
Respondent's relationship to head of household				
Head of household	352	9.8	658	21.2
Spouse	951	26.6	912	29.4
Biological child	936	26.1	816	26.3
Adopted or stepchild	22	0.6	28	0.9
Grandchild	77	2.2	72	2.3
Niece/nephew	23	0.6	18	0.6
Parent	5	0.1	0	0.0
Sibling	36	1.0	25	0.8
Daughter-in-law/son-in-law	196	5.5	145	4.7
Sister-in-law/brother-in-law	22	0.6	8	0.3
Grandparent	0	0.0	0	0.0
Mother-in-law/father-in-law	3	0.1	2	0.1
Other relative	16	0.4	15	0.5
Unrelated person	33	0.9	23	0.7
Partner	900	25.1	363	11.7
-	4	0.1	10	0.3
Other	4	0.1	4	0.1
Don't know	0	0.0	0	0.0
Decline to respond	0	0.0	0	0.0

*At baseline, marital status is reported by the respondent in the Census. In the second follow-up, marital status is reported by the woman at the start of the Household Survey

* "-" represents women who were missed in the census and added individually into the household survey, so relationship to the head of household was not registered.

E3.2 Education Attainment and Literacy

Ninety one percent of second follow-up survey participants had some formal education (Table E3.2). For 64.9% of these women, the highest level of education completed was primary schooling. Literacy was assessed by asking respondents to read from a card the following sentence: "La salud del niño es muy importante para su desarrollo en la vida." Eighty percent of women surveyed were able to read the whole sentence. Ten percent of women could not read the sentence at all.

Table E3.2: Education attainment and literacy

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Ever attended school	3258	3536	90.7	0.9	2849	3099	91.3	1.2
Attended literacy course	579	3537	16.7	1.6	346	3087	10.1	1.3

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Educational attainment and literacy						
Primary	2318	70.0	2.0	1828	64.9	2.5
Secondary	432	13.5	1.0	492	17.0	1.4
High school	441	14.3	1.3	421	13.8	1.5
University	64	2.2	0.5	106	4.3	1.1
Don't know	3	-	-	2	-	-
Decline to respond	0	-	-	0	-	-
Literacy						
Can read entire sentence	2315	63.5	1.7	2462	80.0	1.9
Cannot read at all	421	14.8	1.4	311	10.1	1.2
Can read parts	776	21.4	1.3	315	9.8	1.1
Visually impaired	8	0.3	0.2	7	0.1	0.0
Don't know	13	-	-	4	-	-
Decline to respond	4	-	-	0	-	-

E3.3 Employment

As summarized in Table E3.3, the vast majority of respondents in the second follow-up were homemakers (72.8%). Of the 348 women who reported being employed and working at the time of the interview, most (91.5%) identified "Employee" as their occupational role.

Table E3.3: Employment

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Employment status						
Homemaker	2870	79.0	1.8	2388	72.8	2.3
Employed/paid for work	368	11.6	1.4	348	11.3	1.3
Student	217	6.8	0.8	216	9.4	1.1
Self-employed	0	0.0	-	105	4.6	0.7
Employed by a family member without pay	48	1.5	0.4	22	1.0	0.4
Employed, but did not work in last week	9	0.2	0.1	8	0.6	0.3
Unable to work due to disability	12	0.7	0.3	4	0.2	0.1
Retired	4	0.2	0.1	3	0.1	0.1
Don't know	9	-	-	3	-	-
Decline to respond	0	-	-	2	-	-
Occupational role, among women employed and being paid for work						
Employee	308	80.9	3.9	326	91.5	2.9
Proprietor	22	7.4	2.4	11	5.3	2.5
Independent contractor	28	6.3	1.8	9	3.0	2.0
Employer	10	5.4	2.6	1	0.3	0.3
Don't know	0	-	-	1	-	-
Decline to respond	0	-	-	0	-	-

* Self-employed option was not included in the baseline survey

E3.4 Exposure to Mass Media

Respondents were asked about their exposure to newspapers, radio, and television. As displayed in Table E3.4, among women who demonstrated full or partial literacy in the second follow-up, 25.3% had weekly exposure to newspapers. Forty seven percent of all women had weekly exposure to radio, and 61.4% had weekly exposure to television.

Table E3.4: Exposure to mass media

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Newspapers, among literate women						
Never	1096	35.2	1.8	1636	55.5	2.6
At least once a week	1165	39.0	1.8	626	25.3	2.4
Less than once a week	745	25.8	1.4	506	19.2	1.6
Don't know	11	-	-	7	-	-
Decline to respond	0	-	-	0	-	-
Not applicable	74	-	-	2	-	-
Radio						
At least once a week	2179	62.8	1.5	1468	47.0	2.4
Never	614	18.1	1.2	1118	36.2	2.1
Less than once a week	700	19.0	1.2	499	16.8	1.4
Don't know	4	-	-	6	-	-
Decline to respond	0	-	-	0	-	-
Not applicable	40	-	-	8	-	-
Television						
At least once a week	2109	60.5	2.4	1821	61.4	2.9
Never	950	27.7	2.3	983	29.7	3.1
Less than once a week	423	11.8	0.9	278	8.9	0.8
Don't know	3	-	-	7	-	-
Decline to respond	1	-	-	0	-	-
Not applicable	51	-	-	10	-	-

E3.5 Access to Health Services

E3.5.1 Proximity to health care facilities

Table E3.5 - Table 3.7 display the responses to several survey questions that were used to assess access to health care facilities. Respondents were asked to estimate proximity to health care facilities in terms of distance (kilometers) and travel time. Not surprisingly, respondents typically had more difficulty estimating distance to health care facilities. As shown in the tables below, "Don't know" responses to the distance questions were exceedingly common.

Excluding the 1096 women who were unable to estimate the distance to the closest health facility in the second follow-up, 75% of women reported living 5 kilometers or less from a health facility (Table E3.5). Three-quarters of the sample indicated that it took less than 30 minutes to reach this facility by the usual means of transportation. One-quarter estimated the travel time from their household to the closest health facility to be 30 minutes or more.

Women were also asked for the travel distance and time to their usual health facility, if they had a usual health facility. Excluding the 952 women who did not know the distance to the facility in the second follow-up, three-quarters of the women reported traveling up to 5 kilometers, and three-quarters of the women could travel to the closest facility in less than 30 minutes (Table E3.6).

Of the 2,095 women who reported a recent health facility visit for themselves or for family members in the second follow-up, three-quarters traveled less than 4 kilometers for care. Twenty-five percent of women traveled 4 to 300 kilometers for care. Half of women traveled for less than 20 minutes, and one-quarter spent 45 minutes or more traveling for care. The longest travel time reported for a recent illness was approximately 40 hours.

Table E3.5: Proximity to health care facilities: nearest health facility

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Distance, km	910	2627	0	1	2	4	60
Travel time, min	3401	60	1	10	20	40	5400
Second Follow-Up 2017							
Distance, km	2003	1096	0	1	2	5	200
Travel time, min	2983	15	1	10	20	30	2700

Table E3.6: Proximity to health care facilities: usual health facility

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Distance, km	851	2413	0	1	1.2	4	100
Travel time, min	2470	19	1	10	15	25	59
Second Follow-Up 2017							
Distance, km	1705	952	0	1	2	5	200
Travel time, min	1881	13	1	10	15	30	50

Table E3.7: Proximity to health care facilities: health facility for recent illness

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Distance, km	618	1335	0	1	2	4	100
Travel time, min	1898	9	1	10	20	60	1800
Second Follow-Up 2017							
Distance, km	1364	714	0	1	1	4	300
Travel time, min	2022	10	1	10	20	45	2400

E3.6 Health Status

E3.6.1 Current health status

Table E3.8 shows the self-rated current health status of all women participating in the survey. When asked to evaluate their current health status relative to the past year, 48.2% reported that their health was "about the same" in the second follow-up. While 39.7% reported that their health had improved, 12.1% reported worse health on the day of the interview, compared to last year. Eighty three percent could "easily" perform their daily activities (e.g., work, housework, and childcare). About 17% of women reported at least some degree of difficulty performing these tasks that was related to their health status.

Table E3.8: Current health status

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Current health relative to last year						
Better	1340	38.0	1.4	1206	39.7	1.5
Worse	275	8.2	0.7	406	12.1	1.2
About the same	1917	53.8	1.5	1484	48.2	1.5
Don't know	5	-	-	3	-	-
Decline to respond	0	-	-	0	-	-
Ability to perform daily activities						
Easily	3156	88.5	1.0	2560	83.0	1.3
With some difficulty	339	10.1	1.0	475	14.9	1.2
With much difficulty	39	1.3	0.3	63	2.0	0.4
Unable to do	3	0.1	0.0	0	0.0	-
Don't know	0	-	-	1	-	-
Decline to respond	0	-	-	0	-	-

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Days in the last month that physical health was not good						
No days	2837	78.4	1.4	1987	61.5	1.7
1 to 3 days	222	6.0	0.6	427	13.6	1.0
4 to 7 days	460	15.7	1.3	680	24.9	1.4
7 to 29 days	0	0.0	-	0	0.0	-
All month	0	0.0	-	0	0.0	-
Don't know	14	-	-	5	-	-
Decline to respond	4	-	-	0	-	-
Days in the last month that mental health was not good						
No days	3061	85.4	1.1	2392	75.7	1.6
1 to 3 days	189	5.8	0.7	275	9.6	0.8
4 to 7 days	273	8.8	0.9	422	14.7	1.3
7 to 29 days	0	0.0	-	0	0.0	-
All month	0	0.0	-	0	0.0	-
Don't know	13	-	-	9	-	-
Decline to respond	1	-	-	1	-	-

E3.6.2 Recent illness

Women were asked a series of questions about any illnesses or health problems they had in the two weeks preceding the interview. Out of the women in the second follow-up, 22.1% reported being sick during that time (Table E3.9). Of the 581 women who reported a recent illness, headache (19.4%), cough (12.2%), fever (8.7), and abdominal pain (6.9%) were the most commonly elicited specific complaints. Thirty seven percent of women specified a different health problem not listed in the questionnaire.

Table E3.9: Recent illness (in the last two weeks)

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Respondent was sick during the past two weeks	816	3535	24.3	1.4	581	3095	22.1	1.5

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Type of illness, among those sick in the past two weeks						
Headache	208	26.6	2.2	127	19.4	2.2
Cough	112	11.0	1.6	69	12.2	2.3
Fever	118	12.9	1.7	62	8.7	1.6
Abdominal pain	78	9.1	1.5	48	6.9	1.3
Gynecologic problem	17	2.6	0.9	18	3.3	1.1
Swelling in legs, ankles, or feet	0	0.0	-	13	2.8	1.1
Hypertension	15	2.6	1.0	8	2.2	1.3
Obstetric problem	4	0.3	0.2	2	2.0	1.3
Skin rash/infection	10	1.0	0.4	8	1.3	0.6
Asthma	10	2.0	1.0	4	1.2	1.0
Diarrhea without blood	7	0.5	0.2	1	1.0	1.0
Eye/ear infection	6	0.7	0.4	5	0.7	0.3
Toothache	15	1.1	0.3	5	0.5	0.2
Anemia	2	0.1	0.1	1	0.4	0.4
Stroke	0	0.0	-	1	0.4	0.4
Bronchitis	1	0.7	0.7	1	0.2	0.2
Diabetes	6	1.5	0.8	2	0.1	0.1
Malaria	0	0.0	-	0	0.0	-
Tuberculosis	0	0.0	-	0	0.0	-
Pneumonia	0	0.0	-	0	0.0	-
Diarrhea with blood	1	0.5	0.5	0	0.0	-
Diarrhea with vomiting	3	0.2	0.1	1	0.0	-
Vomiting	3	0.2	0.1	0	0.0	-
Measles	0	0.0	-	0	0.0	-
Jaundice	0	0.0	-	0	0.0	-
HIV/AIDS	0	0.0	-	0	0.0	-
Paralysis	0	0.0	-	0	0.0	-
Chest infection	0	0.0	-	0	0.0	-
Blood in urine	0	0.0	-	0	0.0	-
Other	196	26.5	2.6	203	36.6	3.0
Don't know	2	-	-	2	-	-
Decline to respond	2	-	-	0	-	-

Options for "Swelling in legs, ankles, or feet", "Blood in urine", and "Chest infection" were available only in the follow-up survey. In the baseline, "Chest infection" was included within the "Cough" answer choice.

E3.6.3 Utilization of health services

Table E3.10 summarizes data regarding the utilization of health services among the 581 women who reported an illness in the two weeks preceding the second follow-up interview. Two hundred (36.7%) of these women sought care at a health care facility. Many of these women attended a CESAMO health unit (50.8%); another 20.3% attended a CESAR clinic. Only seven women were hospitalized for their recent illness (9.3% of those who sought care).

Table E3.10: Utilization of health services for illness in the last two weeks

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Sought care for recent illness	295	816	37.7	2.5	200	581	36.7	3.4
Admitted to hospital for care*	7	77	6.4	2.6	7	49	9.3	3.8

Among women who sought care at a public or private hospital, health center/clinic, mobile clinic, or other health facility; public health unit; private office; or pharmacy

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Type of facility where care was sought						
CESAMO	102	29.6	4.7	107	50.8	6.7
CESAR	104	36.5	5.6	34	20.3	6.0
Private health clinic	19	7.0	2.4	19	13.6	4.6
Public hospital	14	3.9	1.2	9	3.1	1.2
Private doctor's office	25	12.5	3.3	13	2.5	0.8
Public mobile clinic	4	1.7	1.0	3	2.0	1.9
CMI	3	1.2	0.9	2	0.6	0.5
Pharmacy	7	1.6	0.8	2	0.5	0.4
Other public health facility	1	0.2	0.2	1	0.4	0.4
Private mobile clinic	2	0.4	0.3	1	0.4	0.4
Traditional healer	3	1.3	0.9	1	0.4	0.4
Private hospital	4	1.1	0.6	1	0.3	0.3
Other private health facility	1	0.3	0.3	0	0.0	-
Community health worker	1	0.1	0.1	0	0.0	-
Other	5	2.7	2.0	6	5.1	2.8
Don't know	0	-	-	1	-	-
Decline to respond	0	-	-	0	-	-

* Women who attended care at a CESAMO or CESAR were not asked about hospitalization.

E3.6.4 Insurance coverage

Less than 2% of women reported being covered by any type of health insurance in the second follow-up (Table E3.11).

Table E3.11: Insurance coverage

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
No insurance	3486	98.8	0.3	3033	98.0	0.6
IHSS	30	0.7	0.2	48	1.5	0.5
Private insurance	10	0.4	0.2	11	0.2	0.1
Armed forces	0	0.0	-	0	0.0	-
Other	5	0.1	0.1	5	0.3	0.2
Don't know	4	-	-	2	-	-
Decline to respond	2	-	-	0	-	-

E3.6.5 Other barriers to health care access

There are many other barriers to accessing health care. Women who reported that they sometimes or never sought care when they felt sick were asked what reasons prevented them from receiving health care when it was needed. Interviewers were instructed to ask in an open-ended manner for all applicable reasons, and to mark the appropriate response options in the questionnaire based on the woman's response. Table E3.12 summarizes the responses to this section. The most commonly cited factors influencing health care access in the second follow-up were the preference for treatment at home (36.9%) and the belief that the health center does not have sufficient medicines (20.7%). Twelve percent of women did not believe they were ill enough to seek treatment. Access and quality of care were also important barriers: 10.9% of women said the health center was too far away, 6.2% said care was too expensive, and 3% said the health center personnel were too difficult to deal with.

Table E3.12: Other barriers to health care utilization, women 15-49 years of age who were sick in the last two weeks but did not seek care

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Treated self at home	308	518	56.3	4.2	114	372	36.9	5.1
Health center does not have sufficient medicines	37	518	7.3	1.6	74	372	20.7	3.2
Too busy with work, children, or other commitments	26	518	4.0	1.1	62	372	14.5	2.7
Not sick enough to seek treatment	108	518	21.8	2.9	36	372	11.6	3.2
Health center is too far away	30	518	5.9	1.6	42	372	10.9	2.8
Care is too expensive	29	518	7.8	2.4	20	372	6.2	1.9
It is difficult to deal with health center personnel	2	518	0.7	0.6	17	372	3.0	1.0
Health center is not well-equipped	4	518	0.6	0.3	6	372	2.3	1.3
Could not find transportation	5	518	1.2	0.8	5	372	2.2	1.5
Could not afford transportation	8	518	1.9	1.2	8	372	1.9	0.9
Tried, but was refused care	0	518	0.0	-	6	372	1.9	1.2
Tried, but no staff was at the center	15	518	2.2	0.8	3	372	1.9	1.5
Health center infrastructure is poor	1	518	1.0	1.0	8	372	1.2	0.6
Did not want to go alone	6	518	0.6	0.2	9	372	1.0	0.4
Health center personnel not knowledgeable	2	518	0.2	0.1	5	372	0.8	0.5
Was previously mistreated	1	518	1.0	1.0	4	372	0.4	0.2
Do not trust the personnel	7	518	1.2	0.6	3	372	0.3	0.2
Did not know where to go	5	518	0.7	0.3	0	372	0.0	-
Could not get permission to go to the doctor	3	518	0.5	0.3	0	372	0.0	-
Religious or cultural beliefs	0	518	0.0	-	0	372	0.0	-
Other	25	518	6.4	1.7	87	372	23.2	5.0

*categories not mutually exclusive (select all that apply)

E4 CHAPTER 4: EXPOSURE TO HEALTH SYSTEM INTERVENTIONS

This chapter summarizes the exposure of women to four health system interventions: community health worker interventions, breastfeeding interventions, child nutrition interventions, and child health interventions.

E4.1 Exposure to Community Health Workers

Respondents were asked about their exposure to community health workers. Eight percent of women reported meeting with a community health worker in the month preceding the second follow-up interview (Table E4.1). Six percent met only once, and 1.2% met two or more times.

Table E4.1: Exposure to community health workers, women 15-49 years

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Did not meet	3256	94.0	0.8	2830	92.3	1.2
One time	193	4.7	0.7	197	6.5	1.2
Two times	29	0.8	0.2	38	0.9	0.2
Three times	8	0.1	0.0	10	0.3	0.1
Four or more times	11	0.3	0.2	2	0.0	-
Don't know	31	-	-	22	-	-
Decline to respond	3	-	-	0	-	-

Referral and advice services provided by community health workers are summarized in Table E4.2. Among women who met with a community health worker in the last month during the second follow-up, family planning methods or counseling was the most common service provided (47.2%). Advice about vaccination for children (36.6%) and child nutrition counseling (35.8%) was also frequently reported.

Table E4.2: Services provided by community health workers, women 15-49 years

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Family planning methods or counseling	107	251	45.3	4.3	117	255	47.2	6.4
Vaccination for children	127	251	45.7	4.9	121	256	36.6	4.5
Child nutrition counseling	107	251	41.2	4.6	102	256	35.8	4.3
Referral for antenatal care	36	251	13.8	3.2	58	255	19.1	3.1
Referral for postnatal care	26	249	9.0	2.2	58	255	15.5	3.2
Referral for voluntary HIV/syphilis counseling and testing*	32	251	15.1	3.8	52	255	15.0	3.1
Information, education, and communication sessions (IEC)	28	251	18.0	4.6	46	255	14.0	3.3
Referral for in-facility delivery	31	250	10.3	2.3	40	255	10.9	2.9

* For the prevention of HIV/syphilis transmission from mother to child

	Second Follow-Up 2017			
	n	N	%	SE
Deworming	82	256	27.3	4.8
Micronutrients	86	255	24.8	3.7
Diarrhea treatment with ORS and zinc	67	255	18.7	3.7
Other	46	254	20.8	4.8

Questions about these topics were not asked at baseline. They were added to the second follow-up survey to track exposure to SMI interventions.

E4.2 Satisfaction with Community Health Workers

Women who met with a community health worker in the month preceding the interview were asked to assess their satisfaction with the following: number of visits, information provided by community health workers, and respectfulness of community health workers. Results are displayed in Table E4.3.

Table E4.3: Satisfaction with community health workers, women 15-49 years of age who met with community health workers in the last month

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Satisfaction with number visits from community health workers						
Very dissatisfied	55	23.3	3.9	21	8.2	3.2
Dissatisfied	14	5.9	2.0	10	6.5	3.2
Satisfied	167	65.4	4.1	198	78.6	4.6
Very satisfied	21	5.4	1.6	26	6.7	1.6
Don't know	4	-	-	4	-	-
Decline to respond	0	-	-	0	-	-
Satisfaction of knowledge and training of community health workers						
Very dissatisfied	55	24.2	4.0	22	9.6	3.8
Dissatisfied	19	6.4	1.9	9	3.3	2.0
Satisfied	153	62.6	4.1	195	79.7	4.8
Very satisfied	25	6.8	1.8	30	7.4	1.6
Don't know	9	-	-	3	-	-
Decline to respond	0	-	-	0	-	-
Satisfaction with information provided by community health workers						
Very dissatisfied	57	24.3	4.0	22	10.4	4.0
Dissatisfied	13	4.7	1.8	7	2.8	2.0
Satisfied	158	64.0	4.2	199	79.7	4.9
Very satisfied	25	7.0	1.8	28	7.1	1.6
Don't know	8	-	-	3	-	-
Decline to respond	0	-	-	0	-	-
Satisfaction with respectfulness shown by community health workers						
Very dissatisfied	56	24.0	4.1	21	9.1	3.7
Dissatisfied	13	6.1	2.3	6	2.7	2.0
Satisfied	163	64.1	3.8	202	81.7	4.7
Very satisfied	22	5.8	1.6	26	6.5	1.5
Don't know	6	-	-	4	-	-
Decline to respond	1	-	-	0	-	-

E4.3 Counseling provided in health facilities

Respondents who had visited a health facility in the last 12 months (1,804 women at the second follow-up) were asked whether they were given counseling about certain topics by health center personnel. Approximately 12.2% of women in the second follow-up reported receiving guidance or advice about breastfeeding in the 12 months preceding the interview (Table E4.4). Approximately 14.7% of women in the second follow-up reported receiving guidance or advice about child nutrition in the 12 months preceding the interview (Table E4.4). Approximately 16.1% of women in the second follow-up reported receiving guidance or advice about danger signs for children's health in the 12 months preceding the interview (Table E4.4).

Table E4.4: Exposure to breastfeeding, child nutrition, and child health interventions, women 15-49 years

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
On breastfeeding	565	1894	23.9	1.5	250	1791	12.2	2.6
On child nutrition	618	1893	26.7	1.7	315	1792	14.7	2.3
On danger signs for children's health	675	1894	29.4	1.8	292	1789	16.1	2.9

E4.4 Counseling provided in health facilities to women with children

In the follow-up survey, respondents who had visited a health facility in the last 12 months and who had children (1,583 women at the second follow-up) were asked whether they were given counseling about certain topics by health center personnel.

Table E4.5: Counseling provided in health facilities to women with children

	Second Follow-Up 2017			
	n	N	%	SE
Deworming	358	1575	21.1	3.1
Micronutrients	277	1574	14.1	2.3
Diarrhea treatment with ORS and zinc	235	1570	12.7	2.1

Questions about these topics were not asked at baseline. They were added to the second follow-up survey to track exposure to SMI interventions.

E5 CHAPTER 5: FAMILY PLANNING

This chapter summarizes key indicators related to the knowledge of, access to, need for, and use of family planning methods among women of reproductive age (15-49 years) participating in the SMI-Honduras second follow-up household survey.

Family planning questions were asked only to women of reproductive age who were married or partnered. During the SMI-Honduras baseline household survey, family planning questions were asked to women whose marital status was reported as "married" or "partnered" by the SMI-Honduras household census respondent. During the second follow-up, the family planning section was instead conditioned on a question about marital status asked to the respondent herself at the start of the woman's health interview. This captured participants who had a change in marital status between the census and household survey and participants whose marital status was incorrectly recorded in the census. At the baseline, 2,293 women qualified for the family planning questions, and at the second follow-up, 2,067 women qualified.

E5.1 Knowledge of the Fertile Period

The successful use of family planning methods depends on an understanding of when during the menstrual cycle a woman is most likely to conceive. This is especially true for traditional methods such as the rhythm method (i.e., periodic abstinence) and the withdrawal method. To assess knowledge of the fertile period, women were asked if there are certain days when a woman is more likely to become pregnant, and when during the menstrual cycle those days occur. Responses to these questions are summarized in Table E5.1. In the second follow-up, 67.7% of women indicated that there were certain days when a woman is more likely to become pregnant, and of these women, only 11.5% identified the correct timing of the fertile period (halfway between two periods).

Table E5.1: Knowledge of the fertile period, women 15-49 years of age who are married or partnered

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Knowledge of the fertile period	1373	2036	66.7	2.1	1220	1818	67.7	2.5

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Knowledge of timing of fertile period, among women who know of fertile period						
Just before period	104	8.6	1.3	132	9.3	1.1
During period	31	2.4	0.7	19	1.8	0.6
Just after period	1012	79.6	1.8	845	76.6	2.1
Halfway between periods	130	9.4	1.1	96	11.5	2.0
Other	1	0.0	-	5	0.8	0.5
Don't know	94	-	-	123	-	-
Decline to respond	1	-	-	0	-	-

E5.2 Use of Family Planning Methods

E5.2.1 Current use

The coverage of contraceptive methods is one of the indicators most frequently used to assess the success of family planning program activities. It is also widely used as a determinant of fertility. Women who said they had heard of a family planning method were asked if they were currently using that method. Table E5.2 displays the percentage of all women using at least one family planning method, as well as the percentage of women reporting use of more than one family planning method at the time of the interview. Sixty five percent of all survey respondents in the second follow-up reported current use of at least one family planning method.

Women considered "in need" of family planning methods are those who are married or partnered, excluding those who report the following characteristics: does not have sexual relations, virgin,

menopausal, infertile, hysterectomy, pregnant, or wants to become pregnant. Even women not considered "in need" of contraception may use a method. Table E5.3 shows the uptake of modern family planning methods among all married and partnered women (65.4%), and among women considered "in need" of contraception (77.2%).

Table E5.2: Current use of family planning methods, women 15-49 years of age who are married or partnered

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Currently in need of contraception	1861	2290	75.1	1.5	1738	2067	82.2	1.5
Current use of any method, among all women	1448	2290	56.4	2.1	1409	2067	65.4	2.2

Table E5.3: Current use of modern family planning methods, women 15-49 years of age who are married or partnered and in need of contraception

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Current use of any method	1408	1861	72.4	2.5	1362	1738	77.2	2.1
Current use of modern method	1302	1861	66.4	2.6	1313	1738	75.1	2.2

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Number of methods the respondent is currently using						
Not using any family planning methods	463	28.0	2.5	377	22.9	2.1
Using 1 family planning method	1379	71.2	2.4	1360	77.1	2.1
Using 2 family planning methods	19	0.8	0.3	1	0.0	-
Not using any family planning methods	0	0.0	-	0	0.0	-
Using 1 family planning method	0	0.0	-	0	0.0	-
Using 2 family planning methods	0	0.0	-	0	0.0	-

Table E5.4 displays the percentage of all women using specific family planning methods. The methods most commonly in use during the second follow-up are injectables (22.9%) and female sterilization (18.4%).

Table E5.4: Current use of family planning methods, by type of method, for women 15-49 years of age who are married or partnered

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Injectable	663	2284	22.8	1.3	558	2065	22.9	1.4
Female sterilization	236	2284	11.4	1.2	314	2067	18.4	1.5
Oral contraceptive	230	2280	9.9	1.2	202	2064	10.6	1.4
Intrauterine device (IUD)	149	2284	5.4	0.7	168	2067	7.2	1.0
Implant	4	2282	0.3	0.2	76	2067	3.0	0.6
Rhythm	65	2284	3.0	0.6	36	2067	1.6	0.3
Male condom	58	2284	2.4	0.5	35	2066	1.1	0.3
Withdrawal	38	2284	1.6	0.4	14	2066	0.4	0.1
Lactational amenorrhea	12	2284	0.3	0.1	2	2067	0.1	-
Emergency contraception (Plan B)	0	2284	0.0	-	1	2067	0.1	0.1
Male sterilization	1	2284	0.0	-	0	2066	0.0	-
Female condom	0	2284	0.0	-	0	2066	0.0	-
Diaphragm	1	2284	0.0	-	0	2067	0.0	-
Sponge	0	2284	0.0	-	0	2065	0.0	-
Other modern method	0	2284	0.0	-	0	2065	0.0	-
Other traditional method	1	2284	0.0	-	1	2061	0.0	-

* categories not mutually exclusive (select all that apply)

E5.3 Sources of Family Planning Methods

Information on where women obtain contraceptive methods is important for family planning program managers. The places where the currently-used family planning methods were acquired are summarized in Table E5.5.

The public sector is the source most commonly reported by users of most modern family planning methods, including female sterilization. Pharmacies are important sources for injectables, the pill, and male condoms. Women report learning about traditional methods in the public sector, from friends or relatives, or at church (Table E5.6).

Table E5.5: Source of modern family planning methods, women 15-49 years of age who are married or partnered

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Injectable						
CESAMO	271	42.4	4.5	342	57.3	5.0
CESAR	293	43.3	4.6	107	17.7	3.5
Pharmacy	42	6.6	1.2	62	17.0	4.3
Community health worker	7	0.8	0.3	25	4.4	1.5
Private health clinic	14	1.9	0.6	7	1.7	0.8

(continued)

	n	%	SE	n	%	SE
Private doctor's office	5	0.8	0.4	3	0.6	0.4
CMI	8	1.1	0.4	6	0.4	0.3
Public hospital	12	1.7	0.6	2	0.2	0.2
Other public health facility	2	0.2	0.2	1	0.1	0.1
Private mobile clinic	1	0.2	0.2	1	0.1	0.1
Public mobile clinic	2	0.4	0.3	0	0.0	-
Private hospital	0	0.0	-	0	0.0	-
Other private health facility	1	0.1	0.1	0	0.0	-
Traditional healer	0	0.0	-	0	0.0	-
Store	0	0.0	-	0	0.0	-
Market	0	0.0	-	0	0.0	-
Church	0	0.0	-	0	0.0	-
Friend/relative	2	0.2	0.2	0	0.0	-
Type 3 Polyclinic	0	0.0	-	0	0.0	-
Other	3	0.3	0.2	2	0.5	0.4
Don't know	2	-	-	0	-	-
Decline to respond	1	-	-	0	-	-
Female sterilization						
Public hospital	164	69.0	5.1	248	76.4	3.9
Private health clinic	20	9.2	3.2	11	5.6	2.3
Private hospital	5	1.0	0.4	13	2.8	1.5
CESAMO	17	5.1	1.9	3	2.4	1.9
Private mobile clinic	2	0.5	0.3	2	2.0	1.9
CMI	2	0.4	0.3	6	1.7	1.0
Other private health facility	3	1.0	0.6	4	1.1	0.8
Other public health facility	6	3.4	2.3	4	0.7	0.4
Private doctor's office	2	3.1	2.8	7	0.7	0.4
Public mobile clinic	3	3.7	2.8	3	0.3	0.2
Community health worker	0	0.0	-	1	0.3	0.3
Pharmacy	0	0.0	-	0	0.0	-
Traditional healer	0	0.0	-	0	0.0	-
Store	0	0.0	-	0	0.0	-
Market	0	0.0	-	0	0.0	-
Church	0	0.0	-	0	0.0	-
Friend/relative	0	0.0	-	0	0.0	-
CESAR	1	0.3	0.3	0	0.0	-
Type 3 Polyclinic	0	0.0	-	0	0.0	-
Other	10	3.2	1.7	11	6.0	2.2
Don't know	0	-	-	1	-	-
Decline to respond	1	-	-	0	-	-
Oral contraceptive						
CESAMO	68	24.7	4.2	115	55.3	7.0
Pharmacy	66	27.2	4.6	45	28.0	6.5
CESAR	84	42.0	6.2	31	12.1	4.7
Public mobile clinic	0	0.0	-	1	0.9	0.8
Community health worker	1	0.3	0.3	2	0.6	0.5
CMI	3	0.8	0.5	2	0.5	0.4
Private hospital	0	0.0	-	1	0.1	0.1
Private health clinic	3	3.6	3.1	1	0.1	0.2
Public hospital	1	0.2	0.2	0	0.0	-

(continued)

	n	%	SE	n	%	SE
Other public health facility	1	0.3	0.3	0	0.0	-
Private doctor's office	0	0.0	-	0	0.0	-
Private mobile clinic	0	0.0	-	0	0.0	-
Other private health facility	1	0.3	0.3	0	0.0	-
Traditional healer	0	0.0	-	0	0.0	-
Store	1	0.2	0.2	0	0.0	-
Market	0	0.0	-	0	0.0	-
Church	0	0.0	-	0	0.0	-
Friend/relative	0	0.0	-	0	0.0	-
Type 3 Polyclinic	0	0.0	-	0	0.0	-
Other	1	0.3	0.3	4	2.4	1.6
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-
Intrauterine device (IUD)						
CESAMO	56	38.1	5.6	85	49.7	7.7
CESAR	34	20.5	4.9	19	10.6	3.6
Public hospital	18	12.3	3.8	23	10.3	2.9
Private doctor's office	7	6.2	3.0	12	10.0	5.0
Private health clinic	15	6.5	1.9	6	5.0	2.9
CMI	8	5.9	2.2	9	4.8	1.8
Private hospital	3	1.7	1.0	3	3.9	2.6
Private mobile clinic	0	0.0	-	3	2.6	1.5
Public mobile clinic	0	0.0	-	2	0.9	0.8
Other public health facility	2	1.8	1.3	1	0.4	0.4
Community health worker	0	0.0	-	1	0.4	0.4
Other private health facility	1	0.4	0.4	0	0.0	-
Pharmacy	0	0.0	-	0	0.0	-
Traditional healer	0	0.0	-	0	0.0	-
Store	1	0.8	0.8	0	0.0	-
Market	0	0.0	-	0	0.0	-
Church	0	0.0	-	0	0.0	-
Friend/relative	0	0.0	-	0	0.0	-
Type 3 Polyclinic	0	0.0	-	0	0.0	-
Other	5	5.8	3.3	4	1.3	0.8
Don't know	1	-	-	0	-	-
Decline to respond	0	-	-	0	-	-
Implant						
CESAMO	1	41.4	28.9	55	66.0	12.6
CESAR	2	37.8	26.8	14	25.0	12.9
Church	0	0.0	-	2	1.9	1.8
CMI	0	0.0	-	1	1.8	1.9
Other public health facility	0	0.0	-	1	1.5	1.5
Community health worker	0	0.0	-	2	1.5	1.1
Pharmacy	0	0.0	-	1	0.5	0.5
Private health clinic	0	0.0	-	1	0.3	0.4
Public hospital	1	7.4	7.9	0	0.0	-
Public mobile clinic	0	0.0	-	0	0.0	-
Private hospital	0	0.0	-	0	0.0	-
Private doctor's office	1	13.4	13.8	0	0.0	-
Private mobile clinic	0	0.0	-	0	0.0	-

(continued)

	n	%	SE	n	%	SE
Other private health facility	0	0.0	-	0	0.0	-
Traditional healer	0	0.0	-	0	0.0	-
Store	0	0.0	-	0	0.0	-
Market	0	0.0	-	0	0.0	-
Friend/relative	0	0.0	-	0	0.0	-
Type 3 Polyclinic	0	0.0	-	0	0.0	-
Other	0	0.0	-	1	1.4	1.4
Don't know	0	-	-	2	-	-
Decline to respond	0	-	-	1	-	-
Male condom						
Pharmacy	14	18.8	6.3	12	41.8	11.0
CESAMO	23	28.3	6.9	15	37.1	12.6
CESAR	18	48.6	10.5	5	13.4	5.6
Market	0	0.0	-	1	4.6	4.0
CMI	1	1.5	1.5	1	2.5	2.5
Public hospital	1	1.5	1.5	1	0.5	0.5
Public mobile clinic	0	0.0	-	0	0.0	-
Other public health facility	0	0.0	-	0	0.0	-
Private hospital	0	0.0	-	0	0.0	-
Private health clinic	0	0.0	-	0	0.0	-
Private doctor's office	0	0.0	-	0	0.0	-
Private mobile clinic	0	0.0	-	0	0.0	-
Other private health facility	0	0.0	-	0	0.0	-
Community health worker	0	0.0	-	0	0.0	-
Traditional healer	0	0.0	-	0	0.0	-
Store	0	0.0	-	0	0.0	-
Church	0	0.0	-	0	0.0	-
Friend/relative	0	0.0	-	0	0.0	-
Type 3 Polyclinic	0	0.0	-	0	0.0	-
Other	1	1.3	1.3	0	0.0	-
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-

*Female condom and sponge omitted from table because no women reported receiving them in baseline or follow-up.

Table E5.6: Source of knowledge about traditional family planning methods, women 15-49 years of age who are married or partnered

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Lactational amenorrhea						
Public hospital	0	0.0	-	1	100.0	0.0
Public mobile clinic	0	0.0	-	0	0.0	-
Other public health facility	0	0.0	-	0	0.0	-
Private hospital	0	0.0	-	0	0.0	-
Private health clinic	0	0.0	-	0	0.0	-
Private doctor's office	0	0.0	-	0	0.0	-
Private mobile clinic	0	0.0	-	0	0.0	-

Other private health facility	0	0.0	-	0	0.0	-
Pharmacy	0	0.0	-	0	0.0	-
Community health worker	0	0.0	-	0	0.0	-
Traditional healer	1	11.9	11.3	0	0.0	-
Store	0	0.0	-	0	0.0	-
Market	0	0.0	-	0	0.0	-
Church	1	7.8	7.1	0	0.0	-
Friend/relative	6	57.5	15.3	0	0.0	-
CESAR	1	13.9	12.8	0	0.0	-
CESAMO	1	8.9	8.6	0	0.0	-
CMI	0	0.0	-	0	0.0	-
Type 3 Polyclinic	0	0.0	-	0	0.0	-
Other	0	0.0	-	0	0.0	-
Don't know	2	-	-	1	-	-
Decline to respond	0	-	-	0	-	-
Rhythm						
Friend/relative	28	35.9	7.5	11	31.4	11.4
CESAR	10	20.0	8.1	6	21.0	10.3
Church	11	23.9	8.5	3	13.8	9.8
Private health clinic	0	0.0	-	2	6.2	4.5
CESAMO	10	10.5	3.5	3	5.5	3.2
Other private health facility	0	0.0	-	1	0.5	0.5
Public hospital	1	1.4	1.4	0	0.0	-
Public mobile clinic	0	0.0	-	0	0.0	-
Other public health facility	0	0.0	-	0	0.0	-
Private hospital	0	0.0	-	0	0.0	-
Private doctor's office	0	0.0	-	0	0.0	-
Private mobile clinic	0	0.0	-	0	0.0	-
Pharmacy	0	0.0	-	0	0.0	-
Community health worker	0	0.0	-	0	0.0	-
Traditional healer	1	1.7	1.5	0	0.0	-
Store	0	0.0	-	0	0.0	-
Market	0	0.0	-	0	0.0	-
CMI	0	0.0	-	0	0.0	-
Type 3 Polyclinic	0	0.0	-	0	0.0	-
Other	3	6.5	4.1	6	21.6	10.4
Don't know	1	-	-	4	-	-
Decline to respond	0	-	-	0	-	-
Withdrawal						
Friend/relative	12	30.4	9.1	5	38.4	17.0
CESAMO	3	7.3	5.4	1	5.9	5.6
Private doctor's office	0	0.0	-	1	2.9	3.1
Public hospital	0	0.0	-	0	0.0	-
Public mobile clinic	0	0.0	-	0	0.0	-
Other public health facility	1	2.1	2.1	0	0.0	-
Private hospital	0	0.0	-	0	0.0	-
Private health clinic	0	0.0	-	0	0.0	-
Private mobile clinic	0	0.0	-	0	0.0	-
Other private health facility	0	0.0	-	0	0.0	-
Pharmacy	0	0.0	-	0	0.0	-
Community health worker	0	0.0	-	0	0.0	-
Traditional healer	1	2.3	2.3	0	0.0	-
Store	0	0.0	-	0	0.0	-

Market	0	0.0	-	0	0.0	-
Church	3	5.9	3.5	0	0.0	-
CESAR	8	32.4	12.0	0	0.0	-
CMI	0	0.0	-	0	0.0	-
Type 3 Polyclinic	0	0.0	-	0	0.0	-
Other	6	19.5	8.2	4	52.9	18.8
Don't know	4	-	-	1	-	-
Decline to respond	0	-	-	2	-	-

E5.4 Non-Use and Interruption of Use of Family Planning Methods

Non-use and interruption of use of family planning methods are major concerns for family planning program managers.

E5.4.1 Prevalence of interruption

The prevalence of interruption and non-use of family planning methods is summarized in Table E5.7. Of women participating in the second follow-up survey, 82.2% are considered "in need" of contraception (i.e., they did not report any of the following: does not have sexual relations, virgin, menopausal, infertile, hysterectomy, pregnant, or wants to become pregnant). Among these women in need, 2.7% reported any interruption in the use of family planning methods in the previous year.

Table E5.7: Interruption and non-use of family planning methods, among women 15-49 years of age who are married or partnered and in need of contraception

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Discontinuation rate*	42	1861	2.7	0.6	48	1738	2.7	0.8

* any interruption in use during the last year, among women in need of contraception

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Number of interruptions in use during the last year						
none	1819	97.3	0.6	1690	97.3	0.8
once	42	2.7	0.6	36	2.4	0.8
2-6 times per year	0	0.0	-	12	0.4	0.2
7-12 times per year	0	0.0	-	0	0.0	-
>12 times per year	0	0.0	-	0	0.0	-

E5.4.2 Reasons for non-use

Women who interrupted use of family planning methods in the year preceding the interview, and those who indicated they were not using any method on the day of the interview, were asked to specify all

reasons why they did not use a method. The interviewer matched responses provided by the respondent to a list of reasons in the questionnaire (Table E5.8). The most commonly cited reasons for non-use at the time of the second follow-up interview were, do not like to use contraception (18.7%), respondent is not sexually active (16.3%), and respondent is trying to become pregnant (8.5%).

Table E5.8: Reasons for non-use of family planning methods, women 15-49 years of age who are married or partnered and who are not using family planning methods

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Do not like to use contraception	172	774	19.3	2.5	133	638	18.7	2.5
Not sexually active	123	774	13.8	1.8	102	638	16.3	2.0
Trying to become pregnant	80	774	14.5	2.3	46	638	8.5	1.8
Currently pregnant	51	774	5.6	1.0	52	638	7.1	1.5
Spouse or partner opposed to use	31	774	3.2	0.9	46	638	5.8	1.4
Married	65	774	7.1	1.9	31	638	5.5	1.7
Opposed to use	42	774	4.8	1.2	34	638	5.3	1.2
Concerned about side effects	29	774	3.0	0.7	35	638	5.3	1.6
Using contraception interferes with normal body processes	15	774	1.5	0.4	42	638	4.8	1.0
Infrequently sexually active	56	774	9.1	1.9	30	638	4.1	1.3
Menopausal	48	774	7.0	1.5	20	638	4.0	1.6
Breastfeeding	40	774	2.9	0.5	33	638	3.1	0.7
Unmarried	38	774	4.7	1.2	11	638	2.6	1.2
No menstrual period since giving birth	13	774	1.2	0.3	21	638	2.6	0.8
Using contraception is uncomfortable	10	774	0.9	0.3	21	638	2.6	0.8
Against religious beliefs	12	774	1.3	0.4	11	638	1.5	0.6
Infertile	38	774	10.9	2.6	9	638	1.2	0.5
Knows no method	9	774	0.8	0.3	3	638	0.6	0.5
The health facility is too far away	6	774	0.6	0.3	4	638	0.5	0.3
Knows no source for methods	6	774	0.9	0.6	3	638	0.4	0.3
The method is too expensive	2	774	0.2	0.1	2	638	0.4	0.3
No method was available	1	774	0.1	0.1	2	638	0.4	0.3
Have undergone hysterectomy	10	774	0.6	0.2	3	638	0.3	0.2
Preferred method was not available	2	774	0.2	0.2	1	638	0.3	0.3
Health facility staff difficult to deal with	1	774	0.1	0.1	1	638	0.3	0.3
Others opposed to use	5	774	0.4	0.2	2	638	0.2	0.1
Could not afford transportation	2	774	0.2	0.2	2	638	0.2	0.1
Mistrust health center staff	5	774	0.5	0.2	2	638	0.2	0.2
Virgin	1	774	0.1	0.1	0	638	0.0	-
Could not find transportation to a health facility	1	774	0.1	0.1	0	638	0.0	-
Other	65	774	10.0	2.0	55	638	11.6	2.6

* "Using contraception affects health" was an option offered in the second follow-up, but was not available at baseline. 56 women selected this as a reason for not using family planning at the second follow-up.

* categories not mutually exclusive (select all that apply)

E5.5 Family Planning Intentions and Decision-Making

E5.5.1 Participation in family planning decision

In this setting in the second follow-up, 73.4% of women report that decisions about family planning methods are jointly made by the respondent and her partner. In only 2.7% of cases, the decision to use family planning methods is up to the respondent's partner alone.

Table E5.9: Participation in family planning decision-making, women 15-49 years of age who are married or partnered and are currently using family planning methods

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Joint decision	1400	81.2	1.6	1315	73.4	2.3
Mostly the respondent	238	12.3	1.1	338	23.0	2.4
Mostly respondent's spouse/partner	100	5.5	0.9	41	2.7	0.8
Others	8	0.9	0.5	11	0.6	0.3
Not applicable - not partnered	2	0.1	0.1	7	0.4	0.2
Don't know	8	-	-	8	-	-
Decline to respond	6	-	-	6	-	-

E5.5.2 Informed choice

With respect to use of family planning methods, "informed choice" refers to whether or not health care workers described other options for family planning methods, possible side effects associated with the method of choice, and how to respond to side effects if they occur. This information can be used to help women select an appropriate contraceptive method, and to assist users in coping with side effects (thus decreasing discontinuation rates for non-permanent methods).

Table E5.10 shows the percent of women currently using family planning methods who were told about other options for contraception (51.8% of women in the second follow-up).

Table E5.10: Family planning decision-making, informed choice, women 15-49 years of age who are married or partnered and who are currently using family planning methods

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Informed about other family planning options by a doctor, nurse, or community health worker	859	1753	48	2.2	921	1725	51.8	3.3

E5.6 Exposure to Family Planning Information

E5.6.1 Family planning messages delivered by health care providers

Respondents were asked about their exposure to family planning messages delivered by health care providers (Table E5.11). Forty nine percent of women in the second follow-up reported being advised about family planning at the health care facility they attend during the past 12 months. Seventeen percent of all respondents indicated that they had been visited by a health promoter who provided information about family planning in the last 12 months. Just 6.5% of respondents who had not attended a health facility in the last 12 months were visited by a health promoter who provided information about family planning.

Table E5.11: Family planning messages delivered by health care providers in the last 12 months, women 15-49 years of age who are married or partnered

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Discussion about family planning methods with staff member at a health facility	716	1179	56.9	2.3	594	1137	49.1	3.4
Discussion about family planning methods during health promoter visit	300	2279	12.0	1.1	359	2050	16.8	1.9
Visit by promotor, among women who had not visited a health facility	36	1095	4.6	1.1	67	912	6.5	1.2

E5.7 Age at First Birth

E5.7.1 Age at first birth

Seventy two percent of respondents in the second follow-up had ever given birth (Table E5.12). Of these women, the median age of the women when their first child was born was 19 years old. Only a quarter of women were 21 years old or older when their first child was born. Eight percent of women reported a history of stillbirth, miscarriage, and/or abortion.

Table E5.12: Parity and age at first birth, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Ever given birth	2862	3537	72.5	1.5	2509	3099	72.5	1.6
Ever had a stillbirth, miscarriage, or abortion	315	3525	8.5	0.8	267	3095	7.9	0.8

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Age at first birth, among parous women	2843	15	10	17	19	21	39
Second follow-up 2017							
Age at first birth, among parous women	2507	0	10	17	19	21	43

E6 CHAPTER 6: MATERNAL HEALTH CARE

This chapter summarizes key indicators pertaining to antenatal care, delivery care, and postpartum care for the most recent live birth in the last two years as reported by women of reproductive age (15-49 years) participating in the SMI-Honduras second follow-up household survey. Participating women were interviewed about all live births in the last five years, but to reduce the impact of recall bias, results reported here are for each woman's most recent birth in the last two years. At the baseline, 2765 women were interviewed about at least one birth in the last two years. At the second follow-up, 2346 women were interviewed about births in the last two years.

E6.1 Antenatal Care

To reduce recall bias, data pertaining to antenatal care are summarized for a woman's most recent birth in the last two years.

E6.1.1 Antenatal care coverage

Early and regular checkups by trained medical providers are important in assessing the physical status of women during pregnancy and provide an opportunity to intervene in a timely manner if any problems are detected. The Maternal and Child Health Questionnaire captured information from women on both overall coverage of antenatal care and the content of care received. To obtain information on source of antenatal care, interviewers recorded all persons a woman consulted for care. Timing of antenatal care was assessed by asking women how many weeks or months pregnant they were when they attended their first antenatal care visit. The same details were recorded for up to eight antenatal care visits.

The percentage of women with a birth in the last two years who attended at least one antenatal care visit for the most recent birth, and the percent distribution of timing of care among those who received any antenatal care are presented in Table E6.1. Definition of "most recent birth" changed between baseline and second follow-up. The type of facility where antenatal care was sought is detailed in Table E6.2.

Among women with a child under the age of 2 in the second follow-up, 96.6% attended at least one antenatal care visit and 92.4% of women had at least one antenatal care visit with a doctor or professional nurse. At the second follow-up, 58.2% of women had an antenatal care visit during the first trimester (first 12 weeks) with a doctor or professional nurse, compared to 43.9% at the baseline. The median age of gestation at the first antenatal care visit during the second follow-up was 2 months.

Table E6.1: Antenatal care coverage for the most recent birth in the last two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Attended at least one antenatal care visit	2616	2757	95.0	0.7	2269	2346	96.6	0.4
Attended at least one antenatal care visit with doctor or professional nurse	2305	2758	83.4	1.7	2170	2346	92.4	1.3
Antenatal care visit with doctor or professional nurse in the first trimester (12 weeks)	1224	2732	43.9	1.7	1338	2291	58.2	1.7

* Definition of most recent birth changed between baseline and second follow-up

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Month of gestation of first ANC visit	2591	23	0.2	1	2	4	9
Second follow-up 2017							
Month of gestation of first ANC visit	2214	50	0.2	1	2	3	9

Regarding the type of facility where antenatal care was usually sought during the second follow-up (Table E6.2), most women who attended antenatal care for their most recent delivery in the last two years sought care in a CESAMO (66%) or CESAR (19.6%). Only 4.1% of women sought antenatal care in a private health clinic.

Table E6.2: Usual antenatal care location, women 15-49 years of age who attended at least one antenatal care visit for most recent birth in the last two years

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
CESAMO	1240	46.3	3.5	1505	66.0	3.9
CESAR	931	37.2	3.6	440	19.6	3.9
Private health clinic	162	5.6	0.8	80	4.1	0.8
CMI	60	2.1	0.4	83	3.3	1.4
Private doctor's office	65	2.5	0.6	77	2.8	0.5
Public hospital	68	2.7	0.5	16	0.9	0.3
Other public health facility	15	0.6	0.2	15	0.5	0.1
Public mobile clinic	2	0.1	0.0	4	0.4	0.3
Private hospital	21	1.1	0.4	9	0.4	0.2
Private mobile clinic	6	0.3	0.2	5	0.2	0.1
Other private health facility	2	0.1	0.0	2	0.1	0.1
Community health worker	3	0.2	0.1	3	0.1	0.1
Pharmacy	0	0.0	-	0	0.0	-
Traditional healer	2	0.1	0.1	0	0.0	-
Other	33	1.3	0.3	28	1.5	0.5
Don't know	2	-	-	2	-	-
Decline to respond	3	-	-	0	-	-

E6.1.2 Frequency of antenatal care visits

Antenatal care can be more effective in avoiding adverse pregnancy outcomes when it is sought early in the pregnancy and continues until delivery. According to the national norm in Honduras, it is recommended that women receive a minimum of four antenatal care visits. The frequency of antenatal care visits is summarized in Table E6.3. Table E6.4 shows the percentage of women with four or more visits with skilled providers and according to best practices.

In the second follow-up, 89.6% of women reported having four or more antenatal care visits during their most recent pregnancy in the last two years. Fifty eight percent of women reported having seven or more antenatal care visits during their most recent pregnancy.

The content of antenatal care is as crucial as the frequency of visits. As shown in Table E6.4, 42.9 percent of all women in the second follow-up survey had four or more antenatal care visits with a doctor or professional nurse, and with each of 10 defined best practices performed at least once during pregnancy (measurement of blood type, test for anemia, test for syphilis, test for HIV, test of blood glucose, test for proteinuria, measurement of maternal blood pressure, measurement of maternal weight, measurement of fundal height, and measurement of fetal heartbeat).

Table E6.3: Frequency of antenatal care visits for the most recent birth in the last two years, women 15-49 years of age

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
None	141	5.1	0.7	77	3.5	0.4
1-3 visits	283	10.9	0.9	150	7.0	0.7
4-6 visits	945	35.7	1.4	766	32.1	1.5
7-9 visits	1337	47.6	1.6	1291	57.0	1.6
10+ visits	16	0.7	0.3	16	0.5	0.1
Don't know	28	-	-	43	-	-
Decline to respond	0	-	-	0	-	-

Table E6.4: Frequency of antenatal care visits with skilled provider for the most recent birth in the last two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
At least four antenatal care visits with doctor or professional nurse	1943	2729	70.3	2.0	1958	2303	84.7	1.6
At least four antenatal care visits with doctor or professional nurse according to best practices*	532	2727	18.8	1.5	1015	2303	42.9	3.3

*measuring blood type, anemia, syphilis, HIV, glucose, proteinuria, blood pressure, weight, fundal height, fetal heartbeat

E6.1.3 Content of antenatal care

The content of antenatal care is an important indicator of quality of care. The coverage of key procedures was assessed among women who received any antenatal care for a birth in the last two years (Table E6.5 and Table E6.6). It is important to remember that the validity of these data hinge on the respondent's understanding of the question and her ability to recall events that may have occurred several years prior to the interview.

There was variation in performance of the 10 "best practice" procedures during the second follow-up: measured maternal blood pressure (99.3%), measured maternal weight (99.2%), measured fetal heartbeat (96.5%), tested for proteinuria (96.4%), measured fundal height (96%), tested for anemia (92.2%), measured blood type (91.6%), tested for HIV (79.8%), measured blood glucose (78.3%), and tested for syphilis (70.2%). Women were unfamiliar with several tests, as evidenced by the high number of missing responses for proteinuria and syphilis in particular.

Table E6.5: Content of antenatal care visits - best practices, among women 15-49 years who attended at least one antenatal care visit for most recent birth in the last two years

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Measured maternal blood pressure	2537	2610	97.2	0.5	2252	2269	99.3	0.2
Measured maternal weight	2556	2614	97.8	0.5	2254	2269	99.2	0.3
Measured fetal heartbeat	2232	2595	85.2	1.3	2182	2268	96.5	0.7
Tested for proteinuria	1936	2234	86.1	1.3	2066	2144	96.4	1.0
Measured fundal height	1871	2558	72.2	2.3	2178	2262	96.0	0.8
Tested for anemia	2040	2377	85.3	1.2	2042	2189	92.2	1.2
Measured blood type	2032	2373	85.0	1.4	1987	2180	91.6	1.2
Tested for HIV	1495	2500	58.9	2.1	1799	2227	79.8	2.9
Measured blood glucose	1429	2284	60.7	1.9	1714	2155	78.3	2.5
Tested for syphilis	1162	2118	53.6	2.4	1442	2021	70.2	3.8

Most women in the second follow-up had a collected blood specimen (97.9%) and a collected urine specimen (96.1%) collected during their antenatal care visits for the most recent birth during the past two years.

Table E6.6: Content of antenatal care visits - other services provided, among women 15-49 years who attended at least one antenatal care visit for most recent birth in the last two years

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Collected blood specimen	2465	2608	94.5	0.6	2226	2267	97.9	0.4
Collected urine specimen	2394	2611	91.2	1.0	2192	2267	96.1	0.7
Offered an HIV test	1693	2516	65.5	2.0	1913	2234	84.9	2.2
Performed an ultrasound	1474	2603	55.1	2.6	1776	2265	77.1	2.7
Tested for diabetes	968	1400	70.4	2.2	1315	1706	76.2	3.3

E6.1.4 Coverage of tetanus toxoid vaccinations during pregnancy

Tetanus toxoid injections are given during pregnancy for the prevention of neonatal tetanus. To prevent transmission of this potentially fatal infection, all women should be vaccinated with tetanus toxoid when they become pregnant. A baby is considered protected if the mother receives two doses of tetanus toxoid during pregnancy, with the second at least two weeks before delivery. However, if a woman was vaccinated previously, she only requires one dose during the current pregnancy. Five doses are considered adequate to confer lifetime immunity. To assess the coverage of tetanus toxoid vaccination, women who reported receiving any antenatal care during their most recent pregnancy were asked if they received tetanus toxoid injections.

As shown in Table E6.7, the coverage of sufficient tetanus toxoid vaccination during pregnancy was 58.5% among women who received antenatal care during the second follow-up. Thirty nine percent of women

received one vaccination during the pregnancy and 46.5% received two or more. Among women with antenatal care, 38% had never been vaccinated before and 15.4% had received a vaccine in the last 10 years. Among women who were not vaccinated during prenatal care visits, 10.6% had never been vaccinated.

Table E6.7: Coverage of tetanus toxoid vaccinations during pregnancy, among women 15-49 years who attended at least one antenatal care visit for most recent birth in the last two years

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Two or more injections during pregnancy	508	39.3	2.1	608	46.5	2.4
One injection during pregnancy, one <10 years before	176	13.5	1.4	174	12.0	1.4
One injection during pregnancy, none <10 years before	229	17.5	1.5	384	27.4	1.8
No injections during pregnancy, one or more <10 years before	105	7.6	0.7	51	3.4	0.7
No injections during pregnancy nor during the 10 years prior	303	22.1	1.8	166	10.6	1.2
Don't know	1283	-	-	886	-	-
Decline to respond	9	-	-	0	-	-

E6.1.5 Exposure to safe pregnancy messages

Women who received antenatal care were asked about a series of topics for which they might have received counseling or advice during their pregnancy. Table E6.8 shows the percentage of women in the second follow-up who were exposed to the following messages: counseled about pregnancy (95.6%); counseled about danger signs during pregnancy (91.5%); given information about in-facility delivery (88.1%); counseled about nutrition during pregnancy (87.7%); advised to deliver in a facility (87.2%); counseled about childcare (85%); counseled about breastfeeding (84.3%).

Exposure to safe pregnancy practices increased from baseline to second follow-up for all counseling categories. In the second follow-up, 83.5% of women were counseled about contraception after delivery compared to 69.8% at baseline. 49.4% of women in the second follow-up, compared to 41% at baseline, were counseled about making a transportation plan for delivery. Compared to 37.6% of women at baseline, 45.4% of women in the second follow-up were advised to have a Cesarean section.

Table E6.8: Exposure to safe pregnancy practices, women 15-49 years of age who attended at least one antenatal care visit for most recent birth in the last two years

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Counseled about pregnancy	2368	2607	90.7	1.0	2171	2264	95.6	0.8
Counseled about danger signs during pregnancy	1997	2596	77.0	1.6	2080	2261	91.5	0.9
Given information about in-facility delivery	2056	2605	79.6	1.6	2014	2262	88.1	1.4
Counseled about nutrition during pregnancy	1881	2587	73.2	1.6	1984	2262	87.7	1.4
Advised to deliver in a facility	2056	2607	79.4	1.6	2013	2264	87.2	1.5
Counseled about childcare	1730	2599	67.0	2.0	1937	2259	85.0	1.5
Counseled about breastfeeding	1973	2600	76.6	1.6	1929	2267	84.3	1.5
Counseled about contraception after delivery	1804	2597	69.8	1.8	1921	2264	83.5	1.5
Counseled about making a transportation plan for delivery	1055	2603	41.0	2.3	1228	2265	49.4	3.9
Advised to have a Cesarean section	963	2605	37.6	1.9	1065	2264	45.4	3.5

E6.2 Delivery Care

Proper medical attention and hygienic conditions during delivery can reduce the risk of complications, infections, and even death for the mother and newborn baby. Characteristics of the delivery, including place of delivery and assistance at delivery were captured for all births in the five years preceding the survey. To reduce recall bias, only data from the most recent delivery within the last two years are summarized.

E6.2.1 Place of delivery

The location of the most recent birth and the means of transportation used to get to the facility are shown in Table E6.9. The majority of births occurred in public hospitals (61.1%) and public health center/clinics (20.9%). Yet 11.2% of women reported giving birth at home or at another person's home. Deliveries in private-sector facilities were rare (4.4%). Among women who delivered in a facility, 51.1% indicated that they used a private vehicle for transport (Table E6.10).

Table E6.9: Place of delivery for most recent birth in the last two years, women 15-49 years of age

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Public hospital	1534	53.5	2.4	1444	61.1	2.1
Public health center/clinic	450	16.9	1.4	502	20.9	1.7
Own home	565	22.0	2.5	251	11.0	1.8
Private health center/clinic	87	2.8	0.5	43	2.3	0.6
Private hospital	33	1.5	0.4	33	1.5	0.4
Other public health facility	10	0.4	0.2	28	1.4	0.4
Other private health facility	1	0.0	-	12	0.6	0.2
Other house	58	2.1	0.4	8	0.2	0.1
Public health ward	1	0.0	-	2	0.1	0.1
Private medical ward	0	0.0	-	3	0.1	0.1
Other	19	0.6	0.2	20	0.7	0.2
Don't know	0	-	-	0	-	-
Decline to respond	2	-	-	0	-	-

Table E6.10: Transportation to place of delivery for most recent birth in the last two years, among women 15-49 years of age who delivered in a facility

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Private vehicle	1375	2111	64.8	2.1	1028	2066	51.1	2.1
Other public transit	412	2111	18.7	1.4	547	2066	26.2	1.9
Ambulance	273	2111	14.0	1.9	445	2066	20.9	1.5
On foot	129	2111	6.1	1.1	145	2066	6.4	1.1

*categories not mutually exclusive (select all that apply)

Women were asked about the proximity to the health facility used to deliver. Of the 2067 women from the second follow-up who delivered in a facility, 1142 were able to estimate the distance to the facility (Table E6.11). The median number of women reported travelling less than 20 km. Fifty percent of women traveled more than two hours to the facility to deliver.

Table E6.11: Proximity to health care facilities: health facility for delivery

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Baseline 2013							
Distance, km	263	1851	0	4	20	45	100
Travel time, min	1968	146	1	45	120	180	9000
Second follow-up 2017							
Distance, km	1142	925	0	4	20	60	300
Travel time, min	1971	96	1	30	108	180	4500

E6.2.2 Assistance at delivery

The assistance a woman receives during childbirth has important health consequences for both mother and child. For women who did not deliver alone in the last two years (97.8% of all births in the second follow-up), the percentage by type of delivery attendant is detailed in Table E6.12. Among women who did not report being alone for delivery, several categories of personnel may have been in attendance. As can be seen in Table E6.12, most in-facility deliveries during the second follow-up were accompanied by a medical doctor (84.4%) and/or a professional nurse (58.5%). For 43.5% of the deliveries an auxiliary nurse was in attendance. For 9.2% a midwife/comadrona was in attendance.

Table E6.12: Types of attendants: assistance at delivery for most recent birth in the last two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Medical doctor	2018	2754	72.0	2.5	1971	2342	84.4	1.8
Professional nurse	1302	2736	47.1	2.2	1329	2310	58.5	3.6
Auxiliary nurse	1029	2725	36.4	1.8	992	2295	43.5	2.4
Midwife/comadrona	516	2732	19.9	2.1	226	2325	9.2	1.3
Laboratory technician	114	2725	4.3	0.9	62	2313	2.7	0.6
Relative	197	2741	8.1	1.5	54	2327	2.3	0.4
Traditional healer	4	2741	0.1	0.1	23	2330	1.2	0.5
Pharmacist	19	2738	0.6	0.2	7	2329	0.3	0.2
Community health worker	7	2742	0.2	0.1	5	2328	0.2	0.1
Other	13	2741	0.4	0.1	23	2324	0.9	0.2

Twenty eight percent of women in the second follow-up delivered with one attendant, 39.6% with two attendants, and 26.7% with three attendants (Table E6.13). For women's most recent live birth in the past two years, 88.6% of deliveries had a skilled attendant present and 87.4% delivered with a skilled attendant in a health facility (Table E6.14).

Table E6.13: Number of attendants: assistance at delivery for most recent birth in the last two years, women 15-49 years of age

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
None	24	0.9	0.2	46	2.2	0.5
One	1095	40.9	2.2	680	28.3	2.5
Two	958	33.2	1.9	952	39.6	2.6
Three	570	20.8	1.3	586	26.7	1.7
Four or more	113	4.2	0.9	82	3.2	0.7
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-

Table E6.14: In-facility delivery with skilled birth attendant: assistance at delivery for most recent birth in the last two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Delivery with a skilled birth attendant	2109	2757	75.2	2.5	2080	2342	88.6	1.9
Delivery with a skilled birth attendant in any health facility	2082	2757	74.1	2.5	2047	2342	87.4	1.9
Delivery with a skilled birth attendant in a CMI or hospital	1826	2757	64.8	2.4	1865	2342	78.5	2.2

E6.2.3 Complications

Pregnancy complications are an important source of maternal and child morbidity and mortality. The type of delivery (vaginal or Caesarian section) among women with births in the last two years is detailed in Table E6.15 along with the percentage of planned in-facility deliveries. Table E6.16 displays the percentage of women with specific complications.

As previously described, the vast majority of births occurred in institutional settings. In 45.8% of these cases during the second follow-up, women indicated that they attended the facility for emergency care. Few women reported seizures prior to delivery (3.4%). Approximately 12.6% of infants were transferred to an intensive care unit after delivery, and 19.6% of women reported excessive bleeding after delivery (more than 1 cup over a two-day period of time).

Table E6.15: Mode of delivery for most recent birth in the last two years, women 15-49 years of age

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Mode of delivery						
Vaginal	2402	87.7	1.0	1948	82.9	1.4
Emergency c-section	223	7.8	0.6	230	10.5	0.9
Planned c-section	130	4.6	0.6	166	6.6	0.9
Don't know	1	-	-	2	-	-
Decline to respond	0	-	-	0	-	-
Reason for seeking delivery care, among in-facility births						
According to birth plan	1130	54.6	2.3	1123	53.5	2.1
Because of emergency	975	45.3	2.3	924	45.8	2.0
Other reason	3	0.1	0.1	16	0.8	0.2
Don't know	6	-	-	4	-	-
Decline to respond	0	-	-	0	-	-

Table E6.16: Delivery complications for most recent birth in the last two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Respondent experienced excessive bleeding in the first day after delivery	689	2743	26.2	2.0	444	2328	19.6	1.8
Child entered neonatal intensive care unit after delivery	225	2748	8.4	0.7	286	2336	12.6	1.2
Respondent experienced seizures prior to delivery	147	2749	6.1	0.9	71	2337	3.4	0.8

E6.2.4 Birth size and weight

Birth weight is a major determinant of infant and child health and mortality. Birth weight of less than 2.5 kilograms is considered low. For all births during the five-year period preceding the survey, mothers were asked about their perception of the child's size at birth: very large, larger than average, smaller than average, or very small. They were then asked to report the actual weight in kilograms if the child had been weighed after delivery. To reduce recall bias, only data from the most recent birth within the last two years are summarized below (Table E6.17).

In the second follow-up, many women perceived their infant to be average in size (69.5%). With most births occurring in institutional settings, it is not surprising that 90.3% of newborns were weighed at birth. Among those who were weighed, 11.7% weighed less than 2.5 kilograms according to the mother's recall (low birth weight).

Table E6.17: Birth size and weight for most recent live birth in the past two years, women 15-49 years of age

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Very large	111	4.6	0.7	44	1.6	0.4
Larger than average	377	13.8	0.9	387	18.2	1.0
Average	1850	67.6	1.6	1588	69.5	1.6
Smaller than average	244	9.3	0.9	170	8.0	0.9
Very small	117	4.7	0.6	59	2.8	0.4
Don't know	56	-	-	98	-	-
Decline to respond	3	-	-	0	-	-

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Child was weighed at birth	2092	2613	78.6	2.3	2046	2255	90.3	1.5
Low birth weight (<2.5kg), among those weighed	235	1604	14.4	1.2	157	1394	11.7	1.2

E6.3 Early initiation of breastfeeding

Coverage of early initiation of breastfeeding is defined as the percentage of women who had a live birth in the past two years and put the child to the breast with one hour of birth. Table E6.18 shows that 76.5% of women initiated breastfeeding within one hour of birth.

Table E6.18: Early initiation of breastfeeding for most recent live birth in the past two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Early initiation of breastfeeding	2060	2739	74.8	1.4	1814	2317	76.5	1.6

E6.4 Postnatal Care

Postnatal care is important both for the mother and the child to treat complications arising from the delivery, as well as to provide the mother with important information on how to care for herself and her child. The postnatal period is defined as the time between the delivery of the placenta and 42 days (six weeks) following the delivery. The timing of postnatal care is important: the first two days after delivery are critical, because most maternal and neonatal deaths occur during this period.

Characteristics of postnatal care, including timing, location, and personnel providing care were captured for all births in the five years preceding the survey. To reduce recall bias, only data from the most recent delivery in the last two years are summarized in the tables below.

E6.4.1 Postnatal checkup for the mother

Data on postnatal care for the mother are summarized in Table E6.19. Table E6.19 shows the percentage of women with a birth in the last two years who were checked at any time after delivery and within one week after delivery; and percentage by timing of the check for women with an in-facility delivery.

Only 84.4% of women recalled being checked after delivery during the second follow-up, and 62.8% reported being checked one week after delivery by a health care provider. Only 45.6% of women with an institutional birth recalled being checked every 15 minutes for the first hour post-partum.

Table E6.20 shows the percent distribution of women who were checked at any time after delivery by type of personnel. Among women with postnatal care visits in the second follow-up, most received care from a doctor (82.1%) or professional nurse (9.8%).

Table E6.19: Postnatal checkup for the mother for most recent live birth in the past two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Any checkup after delivery	1809	2730	64.8	2.0	1914	2343	84.4	1.7
Checked every 15 minutes during the first hour after delivery, among in-facility births	622	1539	42.7	2.1	788	1701	45.6	2.2
Checked within a week after delivery by a skilled provider	1283	2730	45.4	1.9	1417	2343	62.8	3.2

Table E6.20: Provider of care at first postnatal checkup for the mother, most recent live birth in the past two years, among women who attended at least one postnatal care visit

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Doctor	1341	72.5	2.0	1564	82.1	1.9
Professional nurse	215	12.8	1.3	181	9.8	1.3
Auxiliary nurse	203	11.9	1.4	148	7.5	1.9
Midwife/comadrona	37	2.1	0.5	7	0.3	0.1
Community health worker	11	0.7	0.4	5	0.2	0.1
Relative	0	0.0	-	1	0.1	0.1
Laboratory technician	0	0.0	-	0	0.0	-
Pharmacy assistant	0	0.0	-	0	0.0	-
Traditional healer	0	0.0	-	1	0.0	-
Other	0	0.0	-	2	0.1	0.1
Don't know	1	-	-	5	-	-
Decline to respond	1	-	-	0	-	-

E6.4.2 Postnatal checkup for the infant

The results regarding postnatal care for the neonate are shown in Table E6.21: percentage of women with a birth in the last two years whose infants were checked after delivery; percent distributions of infants who were checked by skilled personnel within 24 hours of delivery; and percent distributions of infants who were checked by skilled personnel within one week of delivery.

Approximately 79.4% of women in the second follow-up reported that their infant was checked at any time after delivery. Among all deliveries, 27.6% of women reported that a qualified medical professional checked on their infant within 24 hours of delivery. Table E6.22 shows the attendants for neonatal postnatal care. Most women indicated that a doctor performed a checkup (82.6%). Professional nurse and auxiliary nurse were also reported, though much less frequently.

Table E6.21: Postnatal checkup for neonate for woman's most recent live birth in the past two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Any checkup after delivery	2007	2707	72.5	2.2	1805	2320	79.4	2.3
Checked within 24 hours after delivery by a skilled provider	811	2486	31.0	1.7	520	2043	27.6	3.3
Checked within a week after delivery by a skilled provider	1209	2486	46.5	2.1	1087	2043	54.8	3.9

Table E6.22: Provider of care at first postnatal checkup for the infant, woman's most recent live birth in the past two years, among women whose child attended at least one postnatal care visit

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Doctor	1530	76.4	2.1	1484	82.6	2.1
Professional nurse	185	9.4	1.1	140	8.7	1.1
Auxiliary nurse	226	12.0	1.6	145	7.5	2.0
Community health worker	9	0.6	0.3	16	0.8	0.3
Midwife/comadrona	30	1.5	0.4	7	0.3	0.1
Relative	1	0.1	0.1	1	0.1	0.1
Laboratory technician	1	0.0	-	0	0.0	-
Pharmacy assistant	0	0.0	-	0	0.0	-
Traditional healer	0	0.0	-	0	0.0	-
Other	2	0.1	0.1	2	0.1	0.1
Don't know	23	-	-	9	-	-
Decline to respond	0	-	-	1	-	-

E6.5 Vouchers, Incentives, and Maternal Waiting Homes

To increase use of their services, some facilities and waiting homes offer vouchers and incentives to women to attend care. Table E6.23 displays the percentage of women in the second follow-up who gave birth the past two years and received a voucher at a health facility. Two percent of women received a voucher or financial assistance to attend antenatal care, 4.4% received a voucher or financial assistance for delivery at a health facility, and 2.8% received a voucher or financial assistance for postpartum or postnatal care at a health facility.

Table E6.23: Voucher incentives for care-seeking for most recent live birth in the past two years, women 15-49 years of age

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Received a voucher or other form of financial assistance to attend antenatal care at a health facility	20	2613	0.7	0.2	39	2257	1.5	0.4
Received a voucher or other form of financial assistance to deliver at a health facility	113	2103	6.6	1.2	125	2047	4.4	0.9

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
No voucher	2076	98.2	0.7	1996	97.2	0.7
Yes, for both woman and infant	15	0.8	0.3	33	1.5	0.5
Yes, for woman's care	17	0.9	0.4	33	1.2	0.4
Yes, for infant's care	4	0.2	0.1	2	0.1	0.1
Don't know	1	-	-	2	-	-
Decline to respond	1	-	-	1	-	-

Some facilities that attend deliveries have a **casa materna** or maternal waiting home nearby to provide women who live far away a place to stay while they await delivery or while they recover and prepare to travel home with their infant. Table E6.24 displays how women have commonly used maternal waiting homes during their most recent pregnancy in the past two years. 27.3% of women in the second follow-up report using a maternal waiting home before giving birth and 42.5% of these women report receiving counseling while staying at a maternal waiting home. On average, women stayed at a maternal waiting home for two days and spent 0 Lempira.

Table E6.24: Use of maternal waiting homes for most recent live birth in the past two years, women 15-49 years of age

	Second Follow-Up 2017			
	n	N	%	SE
Heard of maternal waiting home	1383	2339	55.1	3.3
Among women who have heard of maternal waiting homes				
Used a maternal waiting home before giving birth	382	1382	27.3	1.8
Among women who used maternal waiting homes				
Received counseling on health and parenting topics while at waiting home	150	363	42.5	5.0

	N	DK/DTR	Min	25th Percentile	Median	75th Percentile	Max
Second Follow-Up 2017							
Days spent in maternal home	376	0	0	1	2	4	60
Out-of-pocket cost to use maternal home, Lempira	381	1	0	0	0	0	3000

E7 Chapter 7: CHILD HEALTH

This chapter summarizes the health status of children aged 0-59 months whose caregivers participated in the SMI-Honduras Second Follow-up Household Survey. All data summarized in this chapter are based on the caregiver's report.

E7.1 Health status

The age and sex distribution of the de facto population of children aged 0-59 months participating in the caregiver interview module or the anthropometric measures in Honduras is shown in Figure E7.1 by six- or 12-month age groups.

Twenty percent of children surveyed at baseline and 17% of children surveyed at the second follow-up were under 1 year old at the time of the interview. The age distributions of female and male children are similar.

Figure E7.1: Age and sex of children aged 0-59 months in child health survey or anthropometric measures of the de facto population by six- to twelve-month age groups, unweighted

E7.1.1 Current health status

Table E7.1 shows the current health status of all children aged 0-59 months, as reported by their caregivers. The table includes the caregiver's evaluation of current health relative to health the previous year and the percentage of children who can easily perform daily activities. In the second follow-up, approximately 71.2% of children's health was considered by their caregiver to be "good," "very good," or "excellent," compared to 67.7% at baseline.

Relative to the past year, caregivers in the second follow-up evaluation reported that 35.7% of children's health was "about the same" in the second follow-up. While 58.4% of children's health had improved, 5.9% of children experienced reportedly worse health on the day of the interview, compared to last year. Ninety four percent of children could "easily" perform their daily activities (e.g., playing and going to school) according to their caregivers. Five percent of children had some degree of difficulty performing these activities, 0.3% of children had a significant degree of difficulty performing these activities, and 0.5% of children were unable to complete daily activities, according to their caregivers.

Table E7.1: Current health status, among children aged 0-59 months

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Current health status						
Excellent	694	21.7	1.3	568	21.6	1.8
Very good	546	18.3	0.9	343	12.7	1.2
Good	828	27.7	1.2	908	36.9	1.8
Fair	844	27.8	1.0	583	25.2	1.3
Poor	131	4.5	0.5	89	3.7	0.6
Don't know	1	-	-	1	-	-
Decline to respond	3	-	-	0	-	-
Health status relative to a year ago						
Better	1278	53.7	1.2	1162	58.4	1.5
Worse	100	4.2	0.5	119	5.9	0.6
About the same	1000	42.1	1.2	720	35.7	1.5
Don't know	3	-	-	4	-	-
Decline to respond	3	-	-	1	-	-
Ability to perform daily activities						
Easily	2830	93.6	0.6	2329	94.2	0.7
With some difficulty	112	3.9	0.4	137	4.9	0.6
With much difficulty	8	0.3	0.1	10	0.3	0.1
Unable to do	65	2.2	0.4	15	0.5	0.2
Don't know	30	-	-	1	-	-
Decline to respond	2	-	-	0	-	-

E7.1.2 Recent illness

Caregivers were asked a series of questions about any illnesses or health problems that their children had in the two weeks preceding the interview. In the second follow-up survey, approximately 32% of children

were reported as sick during that time (Table E7.2). Of the 774 children who were recently ill, cough (31.9%), fever (29.7%), and diarrhea without blood (7.3%) were the most commonly specified complaints.

Table E7.2: Recent illness, among children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Child was sick in the last two weeks	1108	3045	37.3	1.3	774	2490	32.5	1.8

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Recent illness among children ill in the last 2 weeks						
Cough	346	31.8	1.9	248	31.9	2.4
Fever	340	30.9	1.7	243	29.7	2.3
Diarrhea without blood	107	9.8	1.1	56	7.3	1.3
Skin rash/infection	26	2.5	0.6	22	2.5	0.6
Abdominal pain	15	1.5	0.4	7	1.4	1.0
Diarrhea with blood	11	0.9	0.3	9	1.1	0.5
Vomiting	13	1.2	0.3	8	1.1	0.5
Eye/ear infection	9	0.9	0.3	11	1.1	0.4
Asthma	23	2.2	0.4	5	0.9	0.4
Pneumonia	2	0.1	0.1	7	0.8	0.4
Measles	1	0.1	0.1	1	0.2	0.2
Difficulty urinating	0	0.0	-	1	0.2	0.2
Bronchitis	12	1.0	0.3	1	0.1	0.1
Headache	4	0.4	0.2	1	0.1	0.1
Malaria	0	0.0	-	0	0.0	-
Tuberculosis	1	0.0	-	0	0.0	-
Anemia	2	0.2	0.1	0	0.0	-
Jaundice	0	0.0	-	0	0.0	-
Stroke	0	0.0	-	0	0.0	-
Diabetes	0	0.0	-	0	0.0	-
HIV/AIDS	0	0.0	-	0	0.0	-
Paralysis	2	0.2	0.1	0	0.0	-
Chest infection	0	0.0	-	0	0.0	-
Blood in urine	0	0.0	-	0	0.0	-
Swelling in legs, ankles, or feet	0	0.0	-	0	0.0	-
Other	193	16.3	1.8	154	21.5	1.7
Don't know	1	-	-	0	-	-
Decline to respond	0	-	-	0	-	-

E7.1.3 Utilization of health services for recent illness

Table E7.3 summarizes data regarding the utilization of health services among the 774 children who were sick in the two weeks preceding the interview. The table shows the percentage of children 0-59 months who were sick in the last two weeks for whom care was sought for recent illness and among these,

the percent distribution by type of medical facility where care was sought and whether the child was hospitalized.

In the second follow-up survey, care was sought for 46.7% of these cases. Care was typically sought at CESAMO (51%) or CESAR (12.2%) facilities; some attended private doctor's offices (9.4%). Only two children were hospitalized for their recent illness.

Table E7.3: Utilization of health services for recent illness in the last two weeks, among children 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Sought care for recent illness	591	1108	53.1	2.1	378	774	46.7	2.3
Child was hospitalized for recent illness	9	206	4.1	1.4	2	127	2.0	1.4

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Type of medical facility where care was sought						
CESAMO	220	35.6	3.6	194	51.0	4.9
CESAR	204	36.2	4.4	41	12.2	3.3
Private doctor's office	24	4.4	0.9	42	9.4	2.3
Private health clinic	53	8.6	1.5	30	8.2	1.7
Pharmacy	20	3.1	0.8	26	7.6	1.7
Community health worker	5	1.0	0.4	10	2.2	0.8
CMI	12	2.2	0.6	7	2.0	0.7
Public hospital	13	2.2	0.6	5	1.3	0.6
Traditional healer	7	1.3	0.5	2	0.9	0.6
Private mobile clinic	0	0.0	-	4	0.8	0.5
Public mobile clinic	1	0.2	0.2	3	0.7	0.5
Private hospital	2	0.3	0.2	2	0.6	0.5
Other public health facility	5	0.9	0.5	1	0.2	0.2
Other private health facility	0	0.0	-	0	0.0	-
Other	24	4.2	1.2	11	3.0	1.0
Don't know	1	-	-	0	-	-
Decline to respond	0	-	-	0	-	-

E7.2 Acute respiratory infection

Acute respiratory infection is a leading cause of morbidity and mortality among children. Early diagnosis and treatment with antibiotics can prevent deaths resulting from pneumonia, a common acute respiratory disease. The prevalence of acute respiratory infection was estimated by asking caregivers whether their children aged 0-59 months had been ill with a cough accompanied by short, rapid breathing in the two weeks preceding the interview. If the child had symptoms of an acute respiratory infection, the caregiver was asked about what was done to treat the symptoms and feeding practices during the illness.

E7.2.1 Prevalence of acute respiratory infection and fever

The prevalence of cough, suspected acute respiratory infection, and fever among children aged 0-59 months, as reported by their caregivers, is displayed in Table E7.4. In the second follow-up, 25% of children experienced cough, 12.5% had symptoms of an acute respiratory infection, and 20.6% had a fever in the two weeks preceding the interview.

Table E7.4: Prevalence of suspected acute respiratory infection and fever in the last two weeks, among children 0-59 months

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Child had cough in the last two weeks, by type						
No cough	2218	72.3	1.4	1898	75.1	1.6
Cough without difficulty breathing	433	14.6	0.9	280	12.4	0.9
With difficulty breathing due to chest problem	203	7.1	0.7	125	5.1	0.6
With difficulty breathing due to congested/runny nose	103	3.5	0.4	111	4.6	0.7
With difficulty breathing due to chest problem and congested/runny nose	73	2.3	0.3	70	2.6	0.5
With difficulty breathing due to other reason	1	0.1	0.1	2	0.2	0.1
Don't know	14	-	-	6	-	-
Decline to respond	2	-	-	0	-	-

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Symptoms of acute respiratory infection in the last two weeks	385	3036	13.2	0.9	309	2487	12.5	1.1
Fever in last two weeks	704	3045	24.1	1.2	504	2483	20.6	1.2

E7.2.2 Utilization of health services for suspected acute respiratory infection

Forty four percent of children with symptoms of acute respiratory infection were taken for evaluation and/or treatment of their condition at the second follow-up (Table E7.5).

Table E7.5: Utilization of health services for suspected acute respiratory infection in the last two weeks, among children 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Sought care for suspected acute respiratory infection	564	1022	54.9	2	352	757	44	2.4

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Type of medical facility where care was sought						
CESAMO	213	36.1	3.8	178	50.1	4.3
CESAR	197	36.7	4.5	45	14.4	3.5
Pharmacy	21	3.6	0.8	31	9.5	2.2
Private health clinic	47	7.8	1.5	30	8.3	1.8
Private doctor's office	19	3.5	0.9	33	7.9	2.1
Community health worker	5	1.0	0.4	8	1.9	0.8
CMI	13	2.6	0.7	5	1.7	0.7
Public hospital	5	0.9	0.4	5	1.6	0.7
Other public health facility	5	0.9	0.5	3	0.8	0.5
Private hospital	1	0.1	0.1	2	0.7	0.5
Private mobile clinic	1	0.1	0.1	3	0.7	0.5
Traditional healer	8	1.5	0.6	1	0.5	0.5
Public mobile clinic	1	0.2	0.2	1	0.0	-
Other private health facility	0	0.0	-	0	0.0	-
Other	27	4.9	1.3	7	1.9	0.8
Don't know	1	-	-	0	-	-
Decline to respond	0	-	-	0	-	-

E7.2.3 Utilization of medications for suspected acute respiratory infection

Eighty two percent of children with symptoms of acute respiratory infection were given some type of medication for their condition during the second follow-up (Table E7.6). Forty nine percent of children were administered antibiotic syrups for a suspected acute respiratory infection. Acetaminophen (68.9%) and ibuprofen (6.9%) were also commonly administered. Twenty five percent of children received a treatment other than those listed.

Table E7.6: Utilization of medications for suspected acute respiratory infection in the last two weeks, among children 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Any treatment	884	1020	86.5	1.4	628	758	82.2	2.1
Antibiotic injection	77	882	8.9	0.9	51	626	9.2	2.4
Antibiotic pill	67	882	7.5	1.0	45	626	8.0	1.5
Antibiotic syrup	506	882	56.8	2.2	314	626	49.4	2.2
Aspirin	20	881	2.3	0.5	13	626	2.5	1.3
Acetaminophen	603	883	67.0	1.9	445	627	68.9	2.0
Ibuprofen	98	882	11.2	1.5	42	625	6.9	1.2
Oral rehydration therapy	20	882	2.4	0.6	15	626	2.7	0.9
Other	184	882	22.0	1.8	159	627	25.3	2.2

E7.2.4 Feeding practices during suspected acute respiratory infection

Data on feeding practices during the recent episode of suspected acute respiratory infection are summarized in Table E7.7. The table shows the volume of fluids and the volume of solids given during the illness. At the second follow-up, only 27.1% of children were given more fluids than usual. In total, 38% of children were offered less fluid than usual (or none at all). Twenty eight percent of children were offered the same volume of solid food as usual during their illness. Approximately 70% of children were given less than the usual amount of solid food (or none at all).

Table E7.7: Feeding practices during suspected acute respiratory infection in the last two weeks, among children 0-59 months

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Volume of fluids (including breastmilk) given during illness						
No fluids	26	2.5	0.7	15	1.8	0.6
Much less	133	13.6	1.4	74	8.4	1.0
Somewhat less	324	31.9	2.0	228	28.0	2.5
About the same	454	44.5	2.2	263	34.7	2.4
More	81	7.5	0.9	175	27.1	2.5
Don't know	4	-	-	3	-	-
Decline to respond	0	-	-	0	-	-
Volume of solid foods given during illness						
No solids	29	2.8	0.5	62	8.1	1.5
Much less	185	19.4	1.6	110	14.8	1.9
Somewhat less	448	43.6	2.2	360	47.4	2.3
About the same	331	33.1	2.1	202	27.5	2.3
More	12	1.1	0.3	15	2.2	0.7
Don't know	16	-	-	6	-	-
Decline to respond	1	-	-	3	-	-

E7.3 Diarrhea

Dehydration caused by severe diarrhea in a major cause of morbidity and mortality among children. Exposure to diarrheal disease-causing agents is frequently a result of use of contaminated water and unhygienic practices related to food preparation and disposal of feces. The prevalence of diarrhea was estimated by asking caregivers whether their children aged 0-59 months had had diarrhea in the two weeks preceding the interview. If the child had had diarrhea, the caregiver was asked about treatment and feeding practices during the diarrheal episode.

E7.3.1 Prevalence

Table E7.8 shows the proportion of children aged 0-59 months with diarrhea in the two weeks preceding the interview, as reported by their caregivers (33.1% at the second follow-up). Three percent of children had bloody diarrhea.

Table E7.8: Prevalence of diarrhea in the last two weeks, among children aged 0-59 months

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
No diarrhea	249	61.4	2.9	182	66.9	4.5
Diarrhea without blood	142	36.5	2.8	83	30.5	4.0
Diarrhea with blood	8	2.0	0.7	8	2.7	1.3
Don't know	24	-	-	12	-	-
Decline to respond	0	-	-	0	-	-

E7.3.2 Utilization of health services for diarrhea

Nearly half of children with diarrhea were taken for evaluation and/or treatment of their condition (Table E7.9). Care for these children was often sought in the public sector, although private health centers were visited by 6% of these cases at the second follow-up.

Table E7.9: Utilization of health services for diarrhea in the last two weeks, among children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Sought care for diarrhea	73	150	49	4.8	50	91	51.6	7.6

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Type of medical facility where care was sought						
CESAMO	27	38.6	6.2	30	69.2	9.4
CESAR	22	27.7	6.9	4	8.2	4.6
Private doctor's office	5	7.6	3.0	8	5.4	3.1
Private health clinic	5	7.7	3.3	2	3.5	2.5
Pharmacy	5	4.7	2.4	1	3.5	3.5
Traditional healer	1	1.6	1.6	1	3.2	3.3
Private hospital	1	1.2	1.2	1	2.9	2.9
CMI	1	2.1	2.1	1	1.9	2.0
Community health worker	1	1.6	1.5	1	1.3	1.3
Private mobile clinic	0	0.0	-	1	1.0	1.1
Public hospital	1	1.1	1.1	0	0.0	-
Public mobile clinic	0	0.0	-	0	0.0	-
Other public health facility	2	3.1	2.1	0	0.0	-
Other private health facility	0	0.0	-	0	0.0	-
Other	2	2.9	2.0	0	0.0	-
Don't know	0	-	-	0	-	-
Decline to respond	0	-	-	0	-	-

E7.3.3 Utilization of treatments for diarrhea

A simple and effective response to dehydration caused by diarrhea is a prompt increase in the child's fluid intake through some form of oral rehydration therapy. Oral rehydration therapy may include the use of a solution prepared from commercially produced packets of powdered oral rehydration salts, commercially-produced bottled oral serums, or homemade fluids usually prepared from sugar, salt, and water. Other treatments, including zinc, may be administered as well.

Although care was sought in only 51.6% of diarrhea cases, 88.3% of cases were given some form of treatment at the second follow-up. Bottled oral rehydration serum was the most common form oral rehydration therapy (41.9%). Twelve percent of cases were treated with zinc syrup or pills. Eight percent of cases were treated with an antibiotic pill.

Table E7.10: Utilization of treatments for diarrhea during the last two weeks, among children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Any treatment	123	149	82.1	3.1	80	90	88.3	2.7
Fluids								
Bottled oral rehydration serum	34	148	22.3	4.5	41	90	41.9	6.0
Fluid made with powdered oral rehydration salts	52	148	34.1	5.1	35	90	41.5	6.7
Homemade fluid recommended by health authorities	41	148	27.5	3.9	14	90	17.3	5.2
Medications								
Antibiotic pill	27	149	17.6	4.0	7	91	7.6	3.4
Antidiarrheal pill	19	149	13.5	2.8	16	91	17.5	4.0
Zinc pill	4	149	2.5	1.2	7	90	9.7	4.8
Other type of pill	9	148	6.4	1.8	4	91	4.3	2.0
Unknown pill	5	148	3.5	1.8	0	91	0.0	-
Antibiotic injection	5	148	3.8	1.7	3	90	3.3	1.9
Non-antibiotic injection	1	148	0.7	0.7	0	90	0.0	-
Unknown injection	1	149	0.9	0.9	2	90	2.5	1.8
Intravenous therapy	0	149	0.0	-	0	91	0.0	-
Home remedy/herbal medicine	26	149	17.7	3.5	19	91	20.6	5.6
Antibiotic syrup	40	149	27.0	3.8	10	91	8.1	2.8
Antidiarrheal syrup	17	149	11.0	2.9	9	91	12.5	4.7
Zinc syrup	5	149	3.9	1.7	2	91	2.0	1.3
Other syrup	1	149	1.0	1.0	5	90	5.6	3.3
Unknown syrup	7	149	5.0	1.7	2	91	3.0	2.2
Other treatment	22	149	14.4	3.0	17	91	21.7	5.6

E7.3.4 Feeding practices during diarrhea

Caregivers are encouraged to continue feeding children normally when they suffer from diarrheal diseases and to increase the fluids they are given. These practices help to prevent dehydration and minimize the adverse consequences of diarrhea on the child's nutritional status.

Data on feeding practices during the recent diarrheal episode are summarized in Table E7.11. The table shows the volume of fluids and the volume of solids given during the illness. Only 33.7% of children were given more fluids than usual in the second follow-up survey. Approximately 44% of children were offered less fluid than usual (or none at all). Eight percent of children were offered the same volume of solid food as usual during their illness. Approximately 84% of children were given less than the usual amount of solid food (or none at all).

Table E7.11: Feeding practices among children aged 0-59 months who had diarrhea in the last two weeks

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
Volume of fluids (including breastmilk) given during illness						
No fluids	4	2.9	1.7	2	3.6	2.2
Much less	20	12.2	2.6	9	11.6	4.0
Somewhat less	46	31.5	4.4	29	28.5	6.0
About the same	64	43.0	4.1	22	22.7	4.9
More	16	10.4	2.3	28	33.7	5.7
Don't know	0	-	-	1	-	-
Decline to respond	0	-	-	0	-	-
Volume of solid foods given during illness						
No solids	9	6.3	2.1	16	15.8	3.7
Much less	28	18.5	3.6	24	30.5	5.3
Somewhat less	63	43.7	3.5	35	38.1	6.1
About the same	47	30.2	3.9	10	7.6	2.3
More	2	1.3	0.9	5	8.0	3.0
Don't know	1	-	-	1	-	-
Decline to respond	0	-	-	0	-	-

E7.4 Immunization against common childhood illnesses

Information on immunization coverage was collected for all children aged 0-59 months whose caregivers participated in the survey. Both caregiver's report and review of vaccination card (if available) were used to determine coverage. A vaccination card was available for review for 2,259 children at the second follow-up (90.7% of the sample, unweighted). In Table E7.12, coverage is estimated by vaccine type to include all children with full compliance for age as specified in the national immunization scheme at the time of the survey, according to either an affirmative response from the caregiver that the immunization was received, or a mark that the immunization was received on the vaccination card (for children with a vaccination card available for review at the time of the interview). Children too young to have received a specific vaccine are counted as covered in order to maintain a comparable all-ages sample across vaccine types.

Table E7.12: Immunization against common childhood illnesses, children aged 0-59 months, according to caretaker recall and vaccination card

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
BCG vaccine (tuberculosis)	2792	2853	97.8	0.3	2383	2403	99.2	0.2
Hepatitis B vaccine	2234	2846	78.1	1.7	2212	2384	92.3	0.9
Polio vaccine	2014	2861	70.8	1.4	1884	2406	78.1	1.7
Pentavalent vaccine (DPT, HepB, HiB)	2514	2855	88.1	0.8	2269	2408	94.7	0.6
Rotavirus vaccine	1993	2842	70.1	1.2	2203	2392	91.8	1.2
Pneumococcal conjugate vaccine	2802	2991	93.5	0.6	2205	2386	92.2	1.0
Measles, mumps, and rubella (MMR) vaccine	2723	2878	94.6	0.6	2379	2415	98.6	0.3
Diphtheria, tetanus, and pertussis (DPT) vaccine	2268	2887	78.3	1.2	2149	2410	89.6	0.8

*Pneumonia vaccine was added to national vaccine scheme two years before baseline measurement, so children 24 months of age and older at baseline are compliant without receiving pneumonia vaccine.

In Table E7.13, coverage estimates based on recall are summarized for the full sample, and coverage estimates based on vaccination card data are summarized among the subset with a vaccination card available for review. When considering only caregivers' recall, only 7.9% of children aged 0-59 months were fully immunized for age at the second follow-up survey, reflecting many "Don't know" or "Decline" responses that call into question the reliability and validity of the caregiver recall data. Caregivers were able to definitively answer the entire vaccine recall section for only 1176 children at the second follow-up. Immunization coverage for children 0-59 months based only upon the vaccine card is 65.6%, and when combined with recall-based information, the estimate of full vaccination for age among children 0-59 months is 57.9%.

Table E7.13: Full immunization compliance for age, children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
According to recall + card	1126	2812	39.8	1.4	1569	2358	65.6	2.2
According to vaccine card	711	3013	23.0	1.0	1431	2490	57.9	2.3
According to caregiver's recall	58	1351	4.3	0.8	94	1176	7.9	2.0

*Pneumonia vaccine was added to national vaccine scheme two years before baseline measurement, so children 24 months of age and older at baseline are compliant without receiving pneumonia vaccine.

E7.5 Deworming treatment

Administration of deworming treatment every six months has been shown to reduce the prevalence of anemia in children. Only 30.3% of children aged 12-59 months received at least two doses of deworming treatment in the year preceding the second follow-up interview (Table E7.14).

Table E7.14: Deworming treatment among children aged 12-59 months

	Baseline 2013			Second Follow-Up 2017		
	n	%	SE	n	%	SE
No deworming	695	29.2	1.4	524	25.5	1.4
One dose	746	31.0	1.2	903	44.2	1.4
Two or more doses	923	39.8	1.5	566	30.3	1.5
Don't know	17	-	-	10	-	-
Decline to respond	2	-	-	0	-	-

E8 Chapter 8: INFANT AND YOUNG CHILDREN FEEDING PRACTICES

This chapter summarizes the feeding practices of infants and children aged 0-59 months whose caregivers participated in the SMI-Honduras Household Survey. All data summarized in this chapter are based on the caregiver's report.

E8.1 Breastfeeding

E8.1.1 Exclusive breastfeeding

Coverage of exclusive breastfeeding is defined as the percentage of infants born in the six months prior to the survey who received only breast milk during the previous day. This information is obtained through a 24-hour dietary recall in which the caregiver indicates what the child consumed during the previous day and night. In Honduras during the second follow-up, the sample includes 201 children who are under 6 months of age, and 88 of those children have sufficiently complete dietary recall information to determine whether they are exclusively breastfed. Table E8.1 shows that 39.8% of children under 6 months of age are exclusively breastfed.

E8.1.2 Continued breastfeeding at 1 year

Coverage of continued breastfeeding at 1 year is defined as the percentage of children 12-15 months old who received breast milk during the previous day according to caregiver's dietary recall. In Honduras during the second follow-up, the sample includes 174 children who are between 12 and 15 months of age, and 127 of those children have adequate responses to determine their breastfeeding status. Table E8.1 shows that 71.7% of children continue to receive breast milk at 1 year.

Table E8.1: Breastfeeding among children

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Exclusive breastfeeding among children <6 months	131	285	47.1	3.7	88	200	39.8	4.9
Continued breastfeeding at one year among children 12-15 months	171	212	80.7	2.8	127	174	71.7	4.2

E8.2 Acceptable diet

E8.2.1 Introduction of solid, semi-solid, or soft foods

Coverage of appropriate introduction of solid foods is measured as the percentage of infants 6-8 months of age who received solid or semi-soft foods during the previous day according to caregiver's dietary recall. In Honduras during the second follow-up, the sample includes 92 children who are 6-8 months of age, and 81 of those children have sufficiently complete dietary recall information. Table E8.2 shows that 90.7% of children consumed solid or semi-soft foods.

E8.2.2 Dietary diversity

Coverage of minimum dietary diversity is measured as the percentage of children 6-23 months of age who received foods from at least four food groups during the previous day according to caregiver's dietary recall. In Honduras during the second follow-up, the sample includes 735 children who are 6-23 months of age, and 467 of those children have sufficiently complete dietary recall information to determine dietary diversity. Table E8.2 shows that 66.7% of children achieved the minimum dietary diversity during the previous day.

E8.2.3 Meal frequency

Coverage of minimum meal frequency is measured as the percentage of children 6-23 months of age who received solid foods at least the minimum number of times the previous day, based on age and breastfeeding status. For breastfed children, the minimum is two times for children 6-8 months of age and three times for children 9-23 months of age. For non-breastfed children, the minimum number is four times for all children 6-23 months of age. This information is obtained through caregiver's dietary recall. In Honduras during the second follow-up, the sample includes 735 children who are 6-23 months of age, and 493 of those children have sufficiently complete dietary recall information to determine meal frequency. Table E8.2 shows that 69.2% of children achieved the minimum meal frequency during the previous day.

E8.2.4 Minimum acceptable diet

Coverage of minimum acceptable diet is measured for children 6-23 months of age. For breastfed children to meet the minimum acceptable diet they must have had at least the minimum dietary diversity and the minimum meal frequency during the previous day. For non-breastfed children to meet the minimum acceptable diet they must have had at least two milk feedings, as well as at least the minimum dietary diversity (not including milk feedings) and the minimum meal frequency during the previous day. This information is obtained through caregiver's dietary recall. In Honduras during the second follow-up, the sample includes 735 children who are 6-23 months of age, and 317 of those children have sufficiently complete dietary recall information to determine minimum acceptable diet. Table E8.2 shows that 45.3% of children achieved the minimum acceptable diet during the previous day.

E8.2.5 Consumption of iron-rich or iron-fortified foods

Consumption of iron-rich foods is measured as the percentage of children 6-23 months of age who receive an iron-rich food (e.g., liver, beef, or fish), an iron supplement, or a fortified food that is specially designed for infants and young children, or a food fortified in the home with a product that included iron during the previous day. This information is obtained through caregiver's dietary recall. In Honduras during the second follow-up, the sample includes 735 children who are 6-23 months of age and 459 of those children have sufficiently complete dietary recall information to determine iron consumption. Table E8.2 shows that 62.3% of children consumed an iron-rich food during the previous day.

Table E8.2: Acceptable diet among children 6-23 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Introduction of solid foods among children 6-8 months	135	155	86.2	2.9	81	92	90.7	3.4
Minimum meal frequency among children 6-23 months	560	900	62.2	2.2	493	725	69.2	2.4
Minimum dietary diversity among children 6-23 months	439	936	45.8	2.1	467	735	66.7	2.9
Consumption of iron-rich foods among children 6-23 months	470	936	48.4	2.3	459	735	62.3	2.9
Minimum acceptable diet among children 6-23 months	273	922	29.2	2.0	317	731	45.3	2.7

E8.3 Micronutrient supplementation

E8.3.1 Vitamin A

Interviewers asked the caregiver if their child received a dose of vitamin A in the last six months. Table E8.3 shows that of the 2,492 sampled children 0-59 months of age in the second follow-up, 71.9% received a dose of vitamin A in the last six months.

E8.3.2 Iron

Interviewers showed the caregiver photos of common types of bottles, powders, or syrups and asked if their child received iron pills, powder, or syrup in the last day. Table E8.3 shows that of the 2,492 children 0-59 months of age in the second follow-up sample, 24.6% received a dose of iron in the last day.

Table E8.3: Vitamin A and Iron consumption among children 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Vitamin A in the last six months	2050	2926	69.9	1.3	1782	2429	71.9	1.7
Iron supplement the previous day	645	3031	20.4	1.0	617	2481	24.6	1.5

E8.3.3 Packets of micronutrients

Interviewers showed the caregiver a card with packets of micronutrients (chispitas) and asked how many packets their child received from a health facility and consumed in the last six months. Children are intended to take 60 consecutive daily doses of micronutrient powder in each of three rounds, beginning at age 6, 12, and 18 months, with an adequate consumption considered to be 50 packets. Table E8.4 shows that among children 6-23 months of age sampled in the second follow-up, 59.2% received no packets of micronutrients from a health facility in the last six months.

Table E8.4: Micronutrient powders among children 6-23 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Received any micronutrient packets from health facility in the last six months	192	927	20.1	2.0	366	732	40.8	2.8
Consumed any micronutrient packets	191	927	20.0	2.0	350	720	39.5	2.8
Consumed adequate dose (>=50 packets) of micronutrient powders	1	927	0.1	0.1	157	720	17.6	1.9

* Identical questions were asked in baseline and second follow-up surveys, but the second follow-up interview included photos of the micronutrient products. The baseline survey predated the intervention, so it is possible that questions about receipt and consumption were interpreted by caregivers to include different types of micronutrient supplements at baseline.

E9 CHAPTER 9: NUTRITIONAL STATUS IN CHILDREN

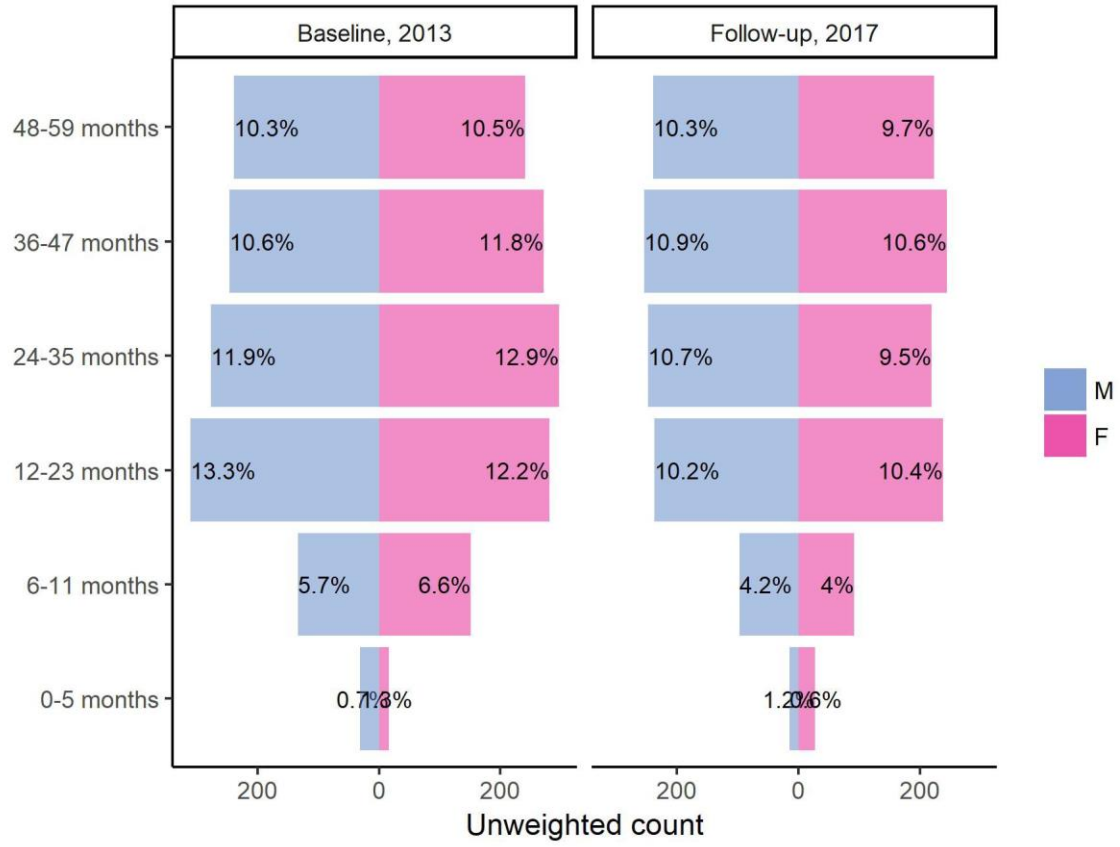
The nutritional status of children aged 0-59 months is an important outcome measure of children's health. The SMI-Honduras Second Follow-up Household Survey collected data on the nutritional status of children by measuring the height and weight of all children aged 0-59 months residing in surveyed households, using standard procedures. Hemoglobin levels of these children were also assessed in the field, using a portable HemoCue™ machine, and these data were used to estimate anemia prevalence. As described in Chapter 1, medically trained personnel who were specifically trained to standardize the anthropometric and hemoglobin measurements conducted the testing. This evaluation allows identification of subgroups of the child population that are at increased risk of malnutrition. The parents of anemic children (hemoglobin level <11.0 g/dL, with altitude adjustment) were informed of this result in real-time and were referred for treatment to the appropriate health service.

Three indicators were calculated using the weight and height data – weight-for-age, height-for-age, and weight-for-height. For this report, indicators of the children's nutritional status were calculated using growth standards published by the World Health Organization (WHO) in 2006. The growth standards were generated using data collected in the WHO Multicenter Growth Reference Study. The findings of the study, whose sample included children in six countries (Brazil, Ghana, India, Norway, Oman, and the United States), describe how children should grow under optimal conditions. As such, the WHO Child Growth Standards can be used to assess children all over the world, regardless of ethnicity, social and economic influences, and feeding practices. The three indicators are expressed in standard deviation units from the median in the Multicenter Growth Reference Study.

A total of 2,492 children aged 0-59 months participated in the SMI-Honduras second follow-up. In practice, 2,442 of these children underwent the physical measurement module. Height and weight data are presented for 2,439 of these children (99.9%, unweighted). Two thousand two hundred fifty children 6-59 months of age were eligible for the anemia test. Hemoglobin was measured in 2,090 children (92.9%, unweighted, of children 6-59 months of age). Parental consent was refused for 149 children, four were not measured because anthropometrists could not obtain a sufficient capillary blood sample or any sample at all, and six cases were not tested for other reasons (for example, because the child did not cooperate). The age and sex distribution of children participating in the physical measurement module is displayed in Figure E9.1 and Figure E9.2.

Figure E9.1: Height and weight measured: Age and sex distribution of children measured, children 0-59 months of age of the de facto population

Figure E9.2: Hemoglobin measured: Age and sex distribution of children measured, children 0-59 months of age of the de facto population



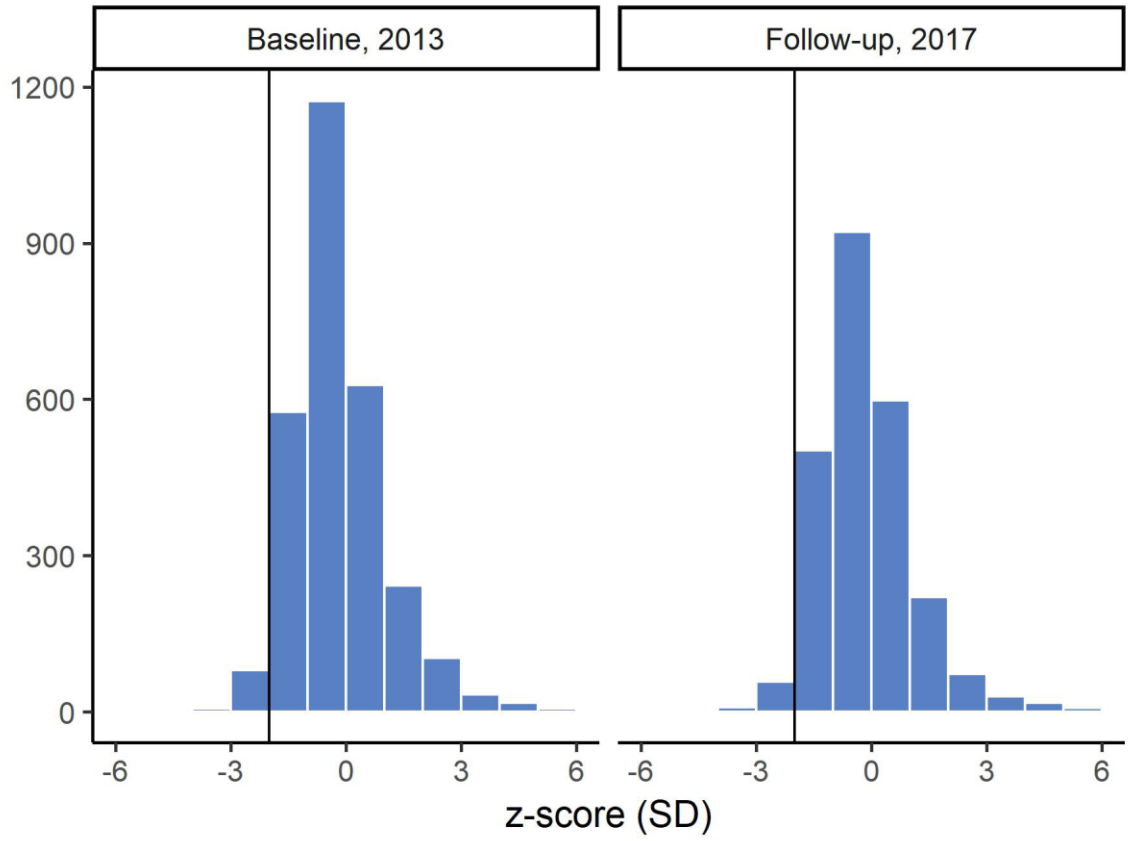
E9.1 Weight-for-Age

Weight-for-age is a good overall indicator of a population's general health, as it reflects the effects of both acute and chronic undernutrition. The weight-for-age indicator does not distinguish between chronic malnutrition (stunting) and acute malnutrition (wasting); a child can be underweight because of stunting, wasting, or both. Children with weight-for-age below minus two standard deviations (-2 SD) are classified as underweight. Children with weight-for-age below minus three standard deviations (-3 SD) are considered severely underweight.

E9.1.1 Unweighted distribution of weight-for-age z-scores

Figure E9.3 shows the distribution of weight-for-age z-scores among all children aged 0-59 months whose measurements were taken. The vertical black lines in the figure denote minus two standard deviations – children to the left of the line are classified as underweight.

Figure E9.3: Distribution of weight-for-age z-scores among children 0-59 months, unweighted



E9.1.2 Prevalence of underweight

As shown in Table E9.1, 7.8% of children aged 0-59 months in the second follow-up are underweight (have low weight-for-age) and 1.4% are severely underweight. The proportion of underweight children is highest (9.3%) in the age groups 24 to 59 months and lowest (1.8%) among those under 6 months. Female children (7%) are less likely to be underweight than male children (8.6%).

Table E9.1: Prevalence of underweight in children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Prevalence of underweight in children 0-59 months, by sex and age (< -2 SD)								
Male	112	1434	8.1	0.9	95	1242	8.6	1.1
Female	72	1452	5.4	0.6	80	1200	7.0	1.1
0-5 months	4	279	1.8	0.9	4	192	1.8	1.0
6-11 months	5	298	2.0	1.0	7	215	4.6	1.7
12-23 months	35	605	5.8	1.0	38	508	7.1	1.3
24-59 months	140	1704	8.6	0.8	126	1527	9.3	1.2
0-59 months	184	2886	6.7	0.6	175	2442	7.8	0.9
6-23 months	40	903	4.6	0.7	45	723	6.4	1.1
Prevalence of severe underweight in children 0-59 months, by sex and age (< -3 SD)								
Male	20	1434	1.4	0.3	19	1242	1.5	0.4
Female	17	1452	1.3	0.3	15	1200	1.2	0.3
0-5 months	1	279	0.5	0.5	1	192	0.4	0.4
6-11 months	2	298	0.6	0.5	3	215	1.3	0.9
12-23 months	5	605	0.7	0.3	8	508	1.3	0.6
24-59 months	29	1704	1.8	0.4	22	1527	1.5	0.4
0-59 months	37	2886	1.3	0.3	34	2442	1.4	0.3
6-23 months	7	903	0.7	0.3	11	723	1.3	0.5
Prevalence of high weight for age in children 0-59 months, by sex and age (> 2 SD)								
Male	76	1434	5.4	0.6	61	1242	5.0	0.7
Female	83	1452	5.3	0.6	56	1200	4.7	0.7
0-5 months	83	279	30.2	2.9	57	192	31.4	4.6
6-11 months	23	298	7.4	1.5	13	215	5.6	1.6
12-23 months	28	605	4.5	0.9	13	508	2.5	0.7
24-59 months	25	1704	1.4	0.3	34	1527	2.0	0.4
0-59 months	159	2886	5.3	0.4	117	2442	4.8	0.5
6-23 months	51	903	5.4	0.7	26	723	3.4	0.8

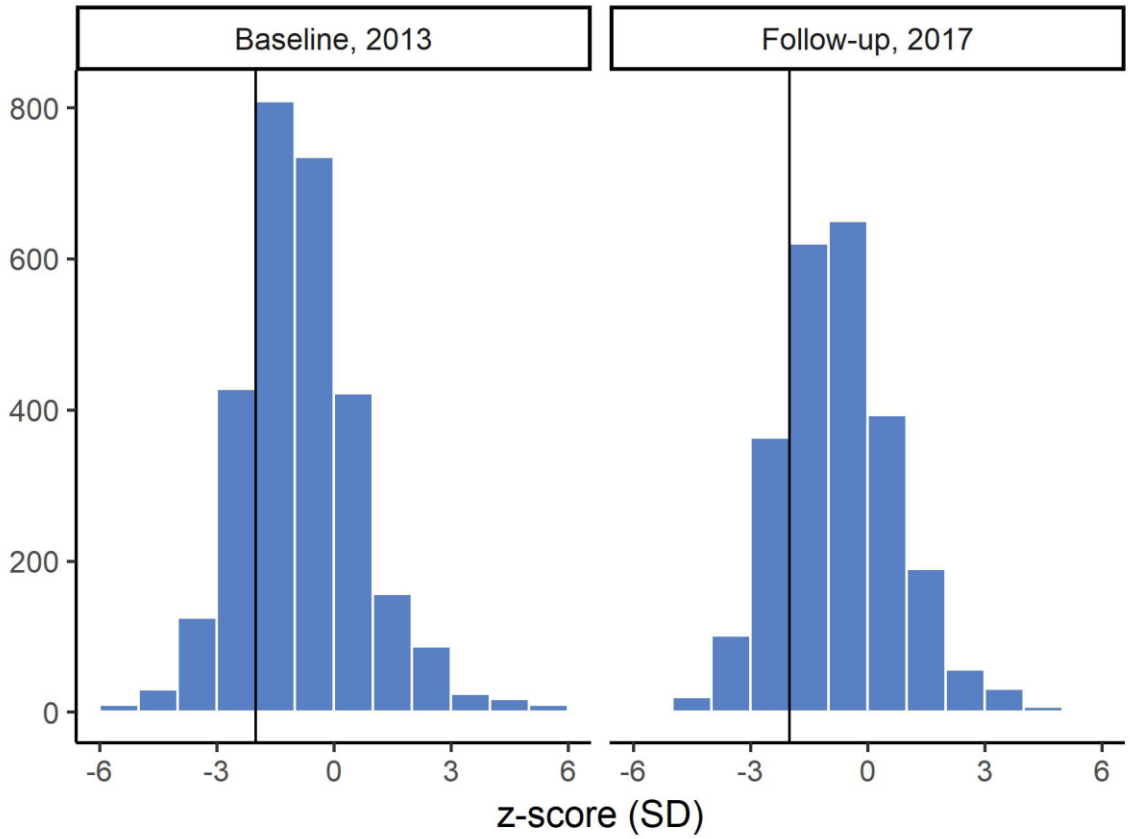
E9.2 Height-for-Age

Height-for-age is an indicator of linear growth retardation and cumulative growth deficits in children. Children whose height-for-age z-score is below minus two standard deviations (-2 SD) from the median of the WHO reference population are considered short for their age (stunted) or chronically malnourished. Children who are below minus three standard deviations (-3 SD) are considered severely stunted. Stunting reflects failure to receive adequate nutrition over a long period of time and is affected by recurrent and chronic illness. Height-for-age, therefore, represents the long-term effects of malnutrition in a population and is not sensitive to recent, short-term changes in dietary intake.

E9.2.1 Distribution of height-for-age z-scores

Figure E9.4 presents the distribution of height-for-age z-scores among all children aged 0-59 months whose measurements were taken. The vertical black lines in the figure denotes minus two standard deviations – children to the left of the line are classified as stunted.

Figure E9.4: Distribution of height-for-age z-scores among children 0-59 months, unweighted



E9.2.2 Prevalence of stunting

Table E9.2 presents the prevalence of stunting in children aged 0-59 months as measured by height-for-age. In the second follow-up, 20.5% of children under age 5 are stunted and 5.2% are severely stunted. Analysis of the indicator by age group shows that stunting is highest (24.1%) in children 24-59 months and lowest (2%) in children aged 0-5 months. Children 12-23 months old have the highest proportion of severely stunted children (5.2%) while the youngest age group (0-5 months) has the lowest proportion (1.2%). A higher proportion (21.8%) of male children is stunted compared with the proportion of female children (19.2%).

Table E9.2: Prevalence of stunting in children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Prevalence of stunting in children 0-59 months, by sex and age (< -2 SD)								
Male	327	1433	24.2	2.0	271	1240	21.8	1.9
Female	275	1448	20.4	1.7	221	1199	19.2	2.2
0-5 months	2	279	0.9	0.7	6	192	2.0	1.0
6-11 months	21	298	6.9	1.5	18	214	7.8	2.2
12-23 months	122	602	21.7	2.3	114	508	22.6	2.8
24-59 months	457	1702	28.5	2.1	354	1525	24.1	2.5
0-59 months	602	2881	22.3	1.6	492	2439	20.5	1.8
6-23 months	143	900	16.8	1.7	132	722	18.2	2.1
Prevalence of severe stunting in children 0-59 months, by sex and age (< -3 SD)								
Male	101	1433	7.6	1.0	75	1240	6.1	1.1
Female	74	1448	5.8	0.8	50	1199	4.3	0.9
0-5 months	2	279	0.9	0.7	3	192	1.2	0.7
6-11 months	3	298	1.0	0.6	5	214	2.1	1.0
12-23 months	33	602	5.7	1.0	30	508	5.2	1.4
24-59 months	137	1702	9.0	1.1	87	1525	6.1	1.2
0-59 months	175	2881	6.7	0.7	125	2439	5.2	0.9
6-23 months	36	900	4.1	0.7	35	722	4.3	1.0

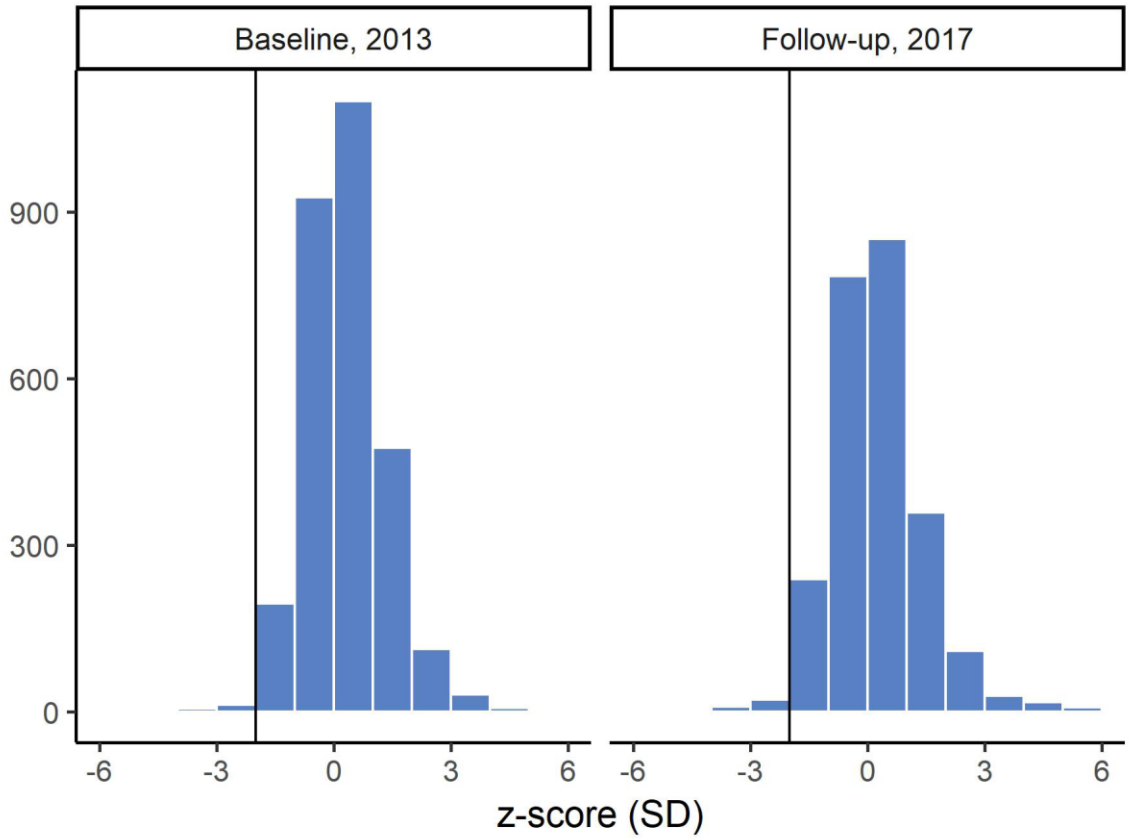
E9.3 Weight-for-Height

The weight-for-height indicator measures body mass in relation to body height or length and describes current nutritional status. Children with z-scores below minus two standard deviations (-2 SD) are considered thin (wasted) or acutely malnourished. Wasting represents the failure to receive adequate nutrition in the period immediately preceding the survey and may be the result of inadequate food intake or a recent episode of illness causing loss of weight and the onset of malnutrition. Children with a weight-for-height index below minus three standard deviations (-3 SD) are considered severely wasted. This weight-for-height indicator also provides data on over-weight and obesity. Children more than two standard deviations (+2 SD) above the median weight-for-height are considered overweight or obese.

E9.3.1 Distribution of weight-for-height z-scores

Figure E9.5 shows the distribution of weight-for-height z-scores among all children aged 0-59 months whose measurements were taken. The vertical black lines in the figure denote minus two standard deviations – children to the left of the line are classified as wasted.

Figure E9.5: Distribution of weight-for-height z-scores among children 0-59 months, unweighted



E9.4 Prevalence of Wasting

Table E9.3 shows the breakdown of nutritional status of children aged 0-59 months as measured by weight-for-height by age groups and sex. In the second follow-up, 3% of children are wasted and 0.9% of children are severely wasted. Analysis of the indicator by age group shows that wasting is highest (4%) in children 12-23 months old and lowest (5.3%) in children aged 6-11 months. Male children are more likely to be wasted than female children (3.6% to 2.4%). Male children are slightly more likely to be severely wasted (0.9%) than females (0.8%).

Overweight and obesity affect a greater proportion of children in SMI areas Honduras than wasting. In this sample, 5.5% of children are overweight or obese (weight-for-height more than +2 SD). The coexistence of both growth retardation and obesity reveals the burden of malnutrition in Honduras.

Table E9.3: Prevalence of underweight in children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Prevalence of wasting in children 0-59 months, by sex and age (< -2 SD)								
Male	28	1432	2.1	0.4	37	1238	3.6	1.0
Female	10	1448	0.8	0.3	27	1199	2.4	0.6
0-5 months	3	279	1.1	0.7	6	191	4.2	1.5
6-11 months	5	298	2.3	1.1	6	214	5.3	2.0
12-23 months	16	602	2.7	0.7	21	508	4.0	1.0
24-59 months	14	1701	0.9	0.3	31	1524	2.2	0.5
0-59 months	38	2880	1.5	0.2	64	2437	3.0	0.5
6-23 months	21	900	2.6	0.6	27	722	4.4	1.0
Prevalence of severe wasting in children 0-59 months, by sex and age (< -3 SD)								
Male	11	1432	0.8	0.3	9	1238	0.9	0.4
Female	5	1448	0.4	0.2	10	1199	0.8	0.3
0-5 months	1	279	0.7	0.7	3	191	2.4	1.3
6-11 months	2	298	0.6	0.4	1	214	1.0	0.9
12-23 months	5	602	0.7	0.3	6	508	1.3	0.6
24-59 months	8	1701	0.5	0.2	9	1524	0.5	0.2
0-59 months	16	2880	0.6	0.2	19	2437	0.9	0.2
6-23 months	7	900	0.7	0.3	7	722	1.2	0.5
Prevalence of overweight in children 0-59 months, by sex and age (> 2 SD)								
Male	64	1432	4.4	0.5	81	1238	5.9	0.8
Female	77	1448	5.4	0.6	64	1199	5.1	0.9
0-5 months	29	279	10.0	2.0	26	191	13.6	3.4
6-11 months	28	298	9.8	1.7	11	214	5.9	1.8
12-23 months	28	602	4.8	0.9	24	508	4.2	0.9
24-59 months	56	1701	3.3	0.5	84	1524	4.8	0.8
0-59 months	141	2880	4.9	0.5	145	2437	5.5	0.7
6-23 months	56	900	6.4	0.9	35	722	4.7	0.8

E9.5 Anemia

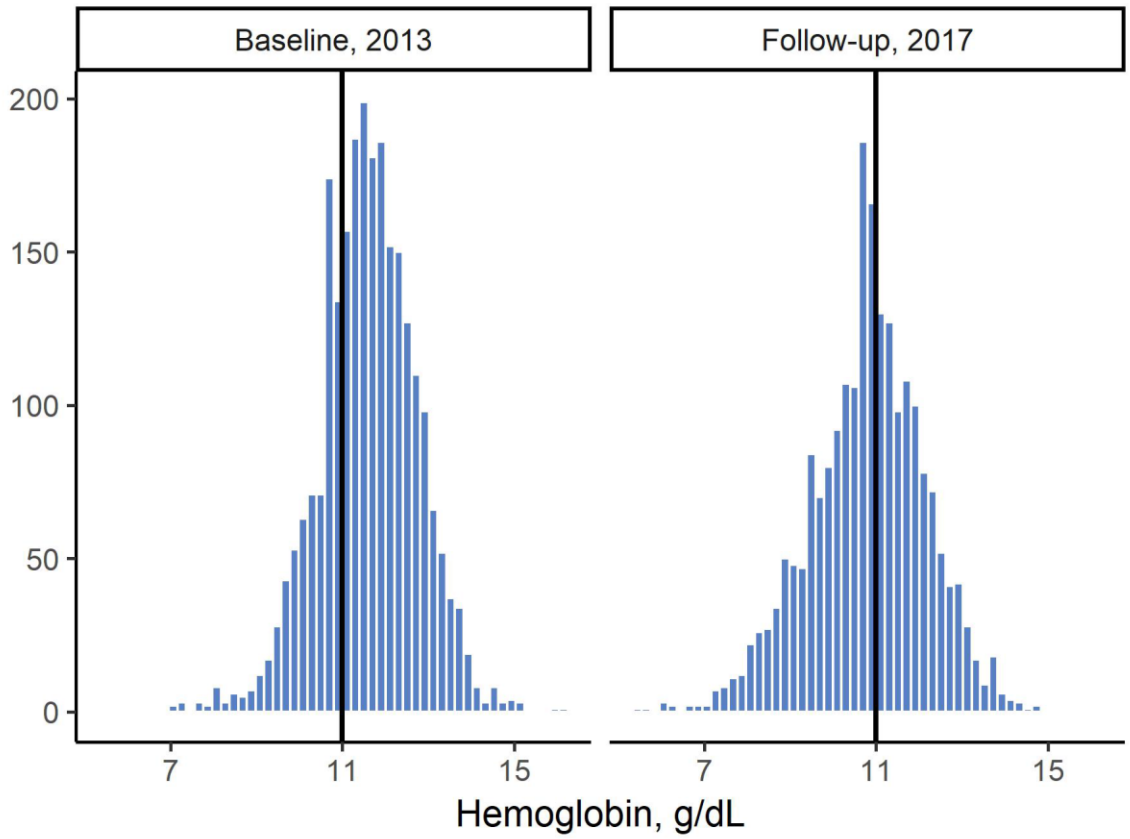
Anemia is a condition characterized by low concentration of hemoglobin in the blood. Hemoglobin is necessary for transporting oxygen to tissues and organs in the body. The reduction in oxygen available to organs and tissues when hemoglobin levels are low is responsible for most of the symptoms experienced by anemic persons. The consequences of anemia include general body weakness, frequent tiredness, and lowered resistance to disease. It is of concern in children because anemia is associated with impaired mental and motor development. Overall, morbidity and mortality risks increase for individuals suffering from anemia.

Common causes of anemia include inadequate intake of iron, folate, vitamin B12, or other nutrients. This form of anemia is commonly referred to as iron-deficiency anemia and is the most widespread form of anemia in the world. Anemia can also be the result of thalassemia, sickle cell disease, malaria, or intestinal worm infestation.

E9.5.1 Distribution of hemoglobin values

Figure E9.6 shows the distribution of hemoglobin values (in g/dL) among children 0-59 months of age. The vertical black lines in the figure denote a hemoglobin concentration of 11.0 g/dL – children to the left of the line are classified as anemic.

Figure E9.6: Distribution of altitude-adjusted hemoglobin values among children 0-59 months, unweighted



E9.5.2 Prevalence of anemia

Levels of anemia were classified as severe (<7.0 g/dL) and any (<11.0 g/dL) based on the hemoglobin concentration in the blood. The cutpoints for anemia are adjusted (raised) in settings where altitude is more than 1,000 meters above sea level, to account for lower oxygen partial pressure, a reduction in oxygen saturation of blood, and an increase in red blood cell production. Although some regions of Honduras are mountainous and well above 1,000 meters, the majority of the population resides at lower levels. The highest elevation of a surveyed household at the second follow-up was 1,989 meters above sea level; 19% of children (unweighted) lived above 1,000 meters. Correction for elevation was applied to anemia diagnosis where data collectors measured altitude over 1,000m (using a handheld GPS device).

Children whose hemoglobin levels are below 11 g/dL are considered anemic, and children who have hemoglobin levels below 7 g/dL are considered severely anemic. Table E9.4 indicates that 52.5% of children under age 5 in Honduras are anemic. Overall, the anemia prevalence is mostly mild to moderate (52%), with only 0.5% of children under 5 years presenting as severely anemic. Anemia prevalence is highest among children aged 0-5 months (74.9%) compared with the other children. More than 67.4% of all children aged 6-23 months, our targeted population for anemia intervention, were found to be anemic.

Table E9.4: Prevalence of anemia, children aged 0-59 months

	Baseline 2013				Second Follow-Up 2017			
	n	N	%	SE	n	N	%	SE
Prevalence of anemia in children 0-59 months, by sex and age								
Male	351	1236	28.0	1.8	581	1090	55.7	1.9
Female	290	1256	23.3	1.7	506	1042	49.0	1.9
0-5 months	19	47	38.9	6.7	32	42	74.9	7.1
6-11 months	133	284	46.2	3.9	152	188	81.6	3.0
12-23 months	205	591	34.0	2.3	285	475	61.8	2.7
24-59 months	284	1570	18.4	1.5	618	1427	44.9	1.9
0-59 months	641	2492	25.6	1.5	1087	2132	52.5	1.5
6-23 months	338	875	37.9	2.3	437	663	67.4	2.2
Prevalence of severe anemia in children 0-59 months, by sex and age								
Male	0	1236	0.0	-	5	1090	0.3	0.2
Female	0	1256	0.0	-	6	1042	0.7	0.3
0-5 months	0	47	0.0	-	0	42	0.0	-
6-11 months	0	284	0.0	-	1	188	0.4	0.4
12-23 months	0	591	0.0	-	6	475	1.6	0.7
24-59 months	0	1570	0.0	-	4	1427	0.2	0.1
0-59 months	0	2492	0.0	-	11	2132	0.5	0.2
6-23 months	0	875	0.0	-	7	663	1.2	0.5

E10 CHAPTER 10: SMI HOUSEHOLD INDICATORS

Table E10.1: Performance of payment indicators, SMI-Honduras Second Follow-up Survey

		Baseline 2013				Second Follow-Up 2017			
	Indicator	n	N	%		n	N	%	SE
4010	Women (age 15-49) delivered in CMI/hospital with skilled attendant in their most recent pregnancy in the last two years	923	1313	69.0	2.4	847	1019	81.5	2.3
4030	Women (age 15-49) who received postpartum care within 7 days with skilled personnel in their most recent pregnancy in the last two years	666	1305	49.4	2.2	654	1020	66.3	3.0
NA	Children (6-23 months) consumed at least 50 doses of micronutrients in the last 6 months	1	926	0.1	0.1	157	720	17.6	1.9

Table E10.2: Performance of monitoring indicators, SMI-Honduras Follow-up Survey

		Baseline 2013				Second Follow-Up 2017			
	Indicator	n	N	%	SE	n	N	%	SE
2010	Women (age 15-49) currently using (or whose partner is using) a modern method of family planning	1302	1861	66.4	2.6	1313	1738	75.1	2.2
1080	Women aged 15-49 with a live birth in the last year	564	3537	10.5	0.5	361	3099	7.3	0.6
1090	Women aged 15-19 with a live birth in the last year	118	699	12.0	1.4	77	595	7.4	1.3
2020	Women (age 15-49) who did not wish to become pregnant and who were not using/not have access to family planning methods (temporary and permanent)	559	1861	33.6	2.6	425	1738	24.9	2.2
2030	Women (age 15-49) who report having stopped using a method of family planning during the previous year	42	1471	3.5	0.8	48	1397	3.4	1.0
4110	Women (age 15-49) with a birth in the last two years who can recognize at least 5 danger signs in newborns	234	1132	21.7	2.0	279	852	33.5	3.3
6010	Women 15-49 who report having any illness in the past two weeks	816	3535	24.3	1.4	581	3095	22.1	1.5
6020	Women (age 15-49) who report having any illness in the past two weeks but did not seek health care	521	816	62.3	2.5	381	581	63.3	3.4
6130	Women who reported satisfaction with health care services at their most recent visit to a health facility	1765	1865	95.1	0.7	1881	1975	96.0	0.6
6140	Women who reported satisfaction with cleanliness of the facility at their most recent visit to a health facility	1166	1871	62.1	2.1	1455	1975	76.2	1.9
6150	Women who reported satisfaction with competence of the medical personnel at their most recent visit to a health facility	1781	1836	97.4	0.5	1899	1968	97.6	0.5
6160	Women who reported they were treated with respect at their most recent visit to a health facility	1204	1874	66.5	1.8	1437	1979	76.1	2.0
3010	Women (age 15-49) who received at least one antenatal care visit by skilled personnel in their most recent pregnancy in the last two years	1115	1313	84.7	1.7	956	1020	93.0	1.5
3020	Women (age 15-49) who received at least four antenatal care visits by skilled personnel in their most recent pregnancy in the last two years	938	1301	71.1	2.1	867	1005	85.3	1.8
4020	Women (age 15-49) who received postpartum care by skilled personnel within the first 48 hours in their most recent pregnancy in the last two years	565	1305	42.1	2.1	444	1020	47.8	3.4
4035	Women (age 15-49) who received postpartum care by skilled personnel between 7 and 42 days after delivery in their most recent pregnancy in the last two years	229	1305	16.7	1.7	342	1020	35.5	3.2

(continued)

		Baseline 2013				Second Follow-Up 2017			
	Indicator	n	N	%	SE	n	N	%	SE
4040	Women (age 15-49) who received postpartum care by skilled personnel within 24 hours after delivery, a second check before 7 days, and a third check between 7 and 42 days after delivery in their most recent pregnancy in the last two years	24	1305	1.5	0.5	39	1020	4.5	1.1
4100	Infants receiving neonatal care by skilled personnel in a health facility within 48 hours of birth in the last two years	544	1259	41.7	2.1	332	906	39.1	4.4
4101	Infants receiving neonatal care by skilled personnel in a health facility within 24 hours of birth in the last two years	431	1259	33.1	1.9	236	906	27.8	3.4
5050	Children born in the last two years who were breastfed within one hour after birth	1059	1392	75.8	1.8	820	1030	78.6	1.9
5060	Children 0-59 months who received ORS and zinc in the last episode of diarrhea in the past two weeks	4	149	3.2	1.5	4	90	3.8	2.1
4145	Children (0-59 months) with pneumonia symptoms who received antibiotics	192	276	68.8	3.9	115	195	59.1	5.4
NA	Children (0-59 months) fully vaccinated for age, according to vaccine card and recall	1126	2812	39.8	1.4	1569	2358	65.6	2.2
5010	Children 12-59 months who received 2 doses of deworming in the last year	923	2364	39.8	1.5	566	1993	30.3	1.5
5040	Children 0-5 months who were exclusively breastfed on the previous day	131	285	47.1	3.7	88	200	39.8	4.9
5075	Children 6-23 months who consumed at least 60 packets of micronutrients (complete dose) in the last 6 months	0	927	0.0	-	137	720	15.5	1.9
5080	Children 12-15 months who were breastfed on the previous day	171	212	80.7	2.8	127	174	71.7	4.2
5090	Children 6-8 months who received solid or semi-solid food on the previous day	135	155	86.2	2.9	81	92	90.7	3.4
5100	Children 6-23 months who received foods from 4 or more food groups during the previous day	439	936	45.8	2.1	467	735	66.7	2.9
5110	Children 6-23 months breastfed or complimentary feeding who received solid, semi-solid, or soft foods the minimum number of times or more during the previous day	560	900	62.2	2.2	493	725	69.2	2.4
5120	Children 6-23 months who received the minimum acceptable diet (apart from breastmilk) during the previous day	273	922	29.2	2.0	317	731	45.3	2.7
5130	Children 6-23 months who received iron-rich or iron-fortified foods during the previous day	470	936	48.4	2.3	459	735	62.3	2.9
6030	Children (0-59 months) who had any illness in the past two weeks, according to report of mother or caregiver	1108	3045	37.3	1.3	774	2490	32.5	1.8
6040	Children (0-59 months) who had any illness in the past two weeks but did not seek health care, according to report of mother or caregiver	10	1089	0.9	0.3	4	769	0.5	0.3
1060	Children 6-23 months with hemoglobin <110g/L	338	875	37.9	2.3	437	663	67.4	2.2
1070	Children 0-59 months with height < -2 SD of the mean of the reference population for age	602	2881	22.3	1.6	492	2439	20.5	1.8

		Baseline 2013			Second Follow-Up 2017		
	Indicator	N	mean	SE	N	mean	SE
6090	Average out-of-pocket household itemized health expenditure for the last month (L)	2921	224.3	44.2	2433	298.0	47.4
6100	Average household itemized expenditure for the last month (L)	2966	3866.3	139.2	2437	5048.5	268.9
6080	Average travel time to nearest health facility (min)	3401	51.2	4.3	2983	46.2	5.0
6085	Average distance to nearest health facility (km)	910	3.9	0.5	2003	4.8	0.8
6120	Average wait time at most recent visit to a health facility (min)	1828	86.2	4.9	1890	95.5	5.8
6082	Average travel time to delivery location for most recent birth in the last two years (min)	1015	143.0	8.8	891	145.4	12.2