Final report

International Growth Centre

Maternal cash transfer

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Executive Summary

In August 2017, Innovations for Poverty Action (IPA) conducted a midline data collection for its Randomized Controlled Trial Evaluation of Save the Children International (SCI)'s LEGACY cash transfer program. Since April 2016, LEGACY (Learning, Evidence Generation, and Advocacy for Catalyzing Policy) has been implemented in three townships across Myanmar's central dry zone. The program is built around two primary components: 1) providing monthly cash transfers to pregnant women in the region, and 2) supplementing these cash transfers with Behavioral Change Communication (BCC) on various nutrition and health seeking topics.

IPA has randomly allocated villages in these townships to one of two treatment groups and one control group. In Treatment group 1, all pregnant mothers (of a certain gestation age at program inception) have been receiving monthly cash payments and are regularly exposed to intensive BCC. In Treatment group 2, qualifying pregnant women receive the cash payments only, while control villages do not participate in any aspect of the LEGACY program. The objective of IPA's study is to determine the overall impact of the unconditional cash transfers, while also testing the marginal effects of BCC as a supplement to the cash transfers. In this case, the overall impact is measured by a variety of health and nutrition indicators. The specific indicators measured as part of the midline survey include: dietary diversity, antenatal through newborn care practices, infant and young child feeding practices, child illness, and WASH.[1]

To calculate the program impact after one year of implementation, IPA has run comparison of mean t-tests between the control group and combined treatment group as well as both treatment groups individually. The findings suggest significant impact on nutrition and IYCF practices, but little to no change in most WASH and health seeking behavior indicators. In general, wherever significant t-test results are observed, the marginal effect in Treatment 1 is larger than in Treatment 2, indicating that BCC has augmented the impact of cash transfers on health outcomes. This finding could have significant implications for ongoing policy discussions.

[1] Due to the short implementation period as of the start of midline data collection (just over one year), anthropometric indicators (incl. stunting and wasting measures), which were measured initially at baseline, were not recorded during midline.

Introduction

The provision of an adequate nutrition in early life is crucial to realizing one's full potential. Inadequate nutrition during the crucial first 1,000 days of life can stunt the physical and cognitive development of a child, leading to a higher susceptibility to illness, poor physical status, and impaired cognitive ability[1]. These limitations lead to loss of productivity and contribute to a cycle of poverty. Robust evidence shows that proper nutrition in the first 1,000 days (from pregnancy through a child's second birthday) is vital to preventing stunting in children, thereby contributing to building a healthy and productive future generation. For these reasons, many maternity and child health programs have focused on providing assistance to pregnant mothers with the aim of preventing stunting in newborn children.[2]

Compared to the Southeast Asia regional average, Myanmar has a poor nutrition status. Of the 4.4 million children under five in Myanmar, approximately 1.6 million (35 percent) are stunted. Stunting starts in-utero, with 14 percent of infants under six months of age already stunted and nutrition further deteriorating for children between 9 and 30 months of age. Levels of stunting in Myanmar vary by location, (38 percent in rural areas versus 27 percent in urban), geographic region (ranging from 24 percent to 58 percent), wealth (50 percent of cases in the lowest quintile versus 20 percent in the highest), and maternal education levels (50 percent of children whose mothers have no education are stunted versus 27 percent of children whose mothers are educated to secondary level or higher).[3]

In the last couple of decades cash transfers have become an important policy tool used by governments, NGOs, and international agencies to alleviate poverty and reduce vulnerability. Cash transfer programs, which today reach between 750 million to one billion people worldwide, have demonstrated a wide range of positive effects, including increasing school participation, enabling the startup of micro-enterprises, and increasing the earnings of vulnerable populations.

Given these premises, Save the Children International (SCI), supported by Livelihoods and Food Security Fund (LIFT), is conducting a large-scale pilot of a maternal cash transfer program called Learning, Evidence Generation, and Advocacy for Catalyzing Policy (LEGACY) in three townships in the Dry Zone of Myanmar. Two central features of the program are the provision of monthly cash transfers to pregnant women, and a set of behavioral change communication (BCC) activities on proper nutrition, Infant and Young Children Feeding (IYCF), health seeking behavior, and hygiene practices. To test and measure the impacts these two features, Innovations for Poverty Action (IPA) has designed a Randomized Control Trial (RCT) study for the LEGACY program. This report summarizes the findings of the midline survey of the study, conducted one year after the inception of the program.

Overview of the LEGACY Program

2.1 Purpose and Design

SCI is implementing the LEGACY program in selected rural villages in three townships in the Dry Zone of Myanmar, with the dual aim of improving the nutritional status of pregnant women and their children, and of generating robust evidence that can be basis for nutrition-sensitive policy advocacy to the Government of Union of Myanmar.

To achieve the first aim, the LEGACY Program invites eligible pregnant women (those in their second and third trimesters, who are permanent residents of selected villages in Pakkoku, Yesagyo, and Mahlaing

[1] Hoddinott, John, Harold Alderman, Jere R. Behrman, Lawrence Haddad, and Susan Horton. 2013. "The Economic Rationale for Investing in Stunting Reduction." GCC Working Paper Series, GCC 13-08.
[2] Ruel and Alderman (2013), Gillespie et al. (2013), and Haddad and Isenman (2014).
[3] UNSCN. 2010. Sixth Report on the World Nutrition Situation: Progress in Nutrition: UNSCN Secretariat c/o WHO.

townships) to participate in the program. Program beneficiaries receive monthly cash transfers of 10,000 kyat for the
remainder of their pregnancy and for the first 23 months of their child's life. The monthly cash transfers are meant to facilitate the beneficiaries' purchase of nutritious foods and access to proper healthcare. Beneficiaries enrolled in selected subset of villages will receive intensive BCC related to nutrition, IYCF, antenatal care (ANC), postnatal care (PNC), and child illnesses, in addition to the cash transfers.

Secondly, to produce robust evidence that can inform effective nutrition policy, IPA has designed an RCT study that allows measurement of the causal impact of the cash on the nutritional outcome of the target group. The study relies on existing healthcare infrastructure – sub-rural healthcare center catchment area - as unit of randomizations. These 102 sub-rural healthcare catchment areas spread across the 3 townships, which are referred to as "clusters" are within two hours from town and were matched into 34 triplets based on proximity.[1] In each random triplet of clusters, one cluster is randomly assigned to Treatment group 1 (T1), one to Treatment group 2 (T2), and one to Control group. Specifically, clusters are randomly assigned as follows:

- Control: 34 sub-rural healthcare catchment areas where no LEGACY activity will take place, for a total of 149 villages
- Treatment 1 (T1): 34 sub-rural healthcare catchment area where cash transfer and BCC activities are both provided, for a total of 142 villages
- Treatment 2 (T2): 34 sub-rural healthcare catchment areas where only cash transfers will be provided. Minimal information about purpose of the cash is communicated via pamphlet or large poster advertisement, for a total of 146 villages

Random assignment ensures that the changes observed can be attributed to the specific intervention.[2] The study in fact compares the outcomes in Control and Treatment groups up to 18 months after the intervention to measure the impact of cash and the incremental impact of the BCC.

In addition to this main random assignment of the intervention, 58 additional villages were selected to test efficacy of the "Government" model. In 40 villages in Pakkoku Township, the cash transfer program was implemented by governmental health workers since October 2016. The study will compare the program delivery outcomes of these villages with the treatment (T2 – only cash) villages that have been selected for comparability. 18 villages will function as control, in addition to the control group in the main RCT.

Overall, a total of 485 villages are considered part of the study, and data collected on these villages are described in the following sections. For a more detailed discussion of the research design, randomization, and census and listing data collections, please consult the Research Protocol and Census and Randomization Report.

2.2 Program Implementation

The LEGACY program is being implemented by SCI, the Myanmar Midwives and Nurses Association (MNMA), and Pact Global Microfinance (PGMF). MNMA is responsible for coordinating sensitization and enrollment of eligible women in the program. The initial enrollment in the program was launched in April and May 2016, with 1,422 women enrolled during the initial launch. Since then, newly pregnant women have been enrolled through monthly enrollment. MNMA is also responsible for organizing BCC activities in the 146 villages that are designed to receive BCC activity along with the cash transfers. Since May 2016, mother-to-mother support groups were organized and preliminary community mobilization activities were done in all Treatment 1 villages. Intensive behavior change interventions were launched in January 2017.

[1] There were total of 714 rural villages belonging to 137 clusters in the three townships.
[2] For more details on the study design, literature review of the cash transfers, and randomization strategy, please see the Census and Randomization Report.

PGMF handles monthly cash disbursement through its network of loan agents in the project townships. For each program beneficiary, PGMF created an MCCT account; each MCCT account receives 10,000 kyat each month, and the PGMF agent hands over the requested amount to mother from her MCCT account during the regularly scheduled monthly visit to the village. The mother specifies how much of money in her MCCT account that she would like to withdraw. PGMF created the first MCCT accounts for the initial enrollees in May 2016, and the first cash disbursements occurred in June 2016.

Midline Data Collection

3.1 Objective

The purpose of conducting a midline survey was to gather evidence after one year of program implementation in order to 1) conduct preliminary comparisons between the control group and both treatment arms of the study (as well as treatment/control comparisons in the government model villages) and 2) show overall changes in key indicators from baseline data. The 14 key indicators that were included in the midline survey are:[1]

1. % of mothers practicing exclusive breastfeeding (for children aged 0-6 months)
2. Mean dietary diversity score in children aged 6-23 months
3. % of children aged 6-23 months with Minimum Acceptable Diet
4. % of children aged 6-23 months with Minimum Meal Frequency
5. Mean dietary diversity score among targeted women
6. % of mothers practicing timely initiation of breastfeeding (0-23 months old)
7. % of mothers practicing timely introduction of complementary feeding (6-9 months old)
8. % of mothers applying safe water treatment and storage practices
9. % of children that exhibit signs of ARI and diarrhea receiving health care within appropriate time period
10. % of women reporting appropriate hand washing in last 24 hours
11. % of mothers demonstrating knowledge of optimal IYCF practices
12. % of women receiving ANC/PNC & reporting appropriate health seeking behavior
13. % of women reporting using cash for nutritious foods for their own consumption
14. % of women reporting using cash for nutritious foods for their children

3.2 Midline Timeline

The preparation for the midline survey began in early July 2017 with initial discussions between IPA, Save the Children, and lead Researchers from Duke University. Different versions of the midline survey were deliberated by all parties until reaching consensus on a final version on 20th July 2017. The field team recruitment process started on 3rd July, and all hiring for field staff was finalized by 16th July. The training of field staff, lasting one week, commenced on 21st July (including all survey pilots). In total, two pilots of the midline questionnaires were conducted in villages outside of the study area in Pakokku and Yaesagyo Townships. Before commencing the actual data collection, the field team underwent a "false start," during which all enumerators were told the survey had officially begun, even though respondents were still being drawn from the pilot sample. This gave managers an opportunity to observe enumerator performance under realistic survey conditions. After the false start, the field team performance was reviewed by the Research Associate (RA) and team leaders based on their observations from training and piloting. By 03rd August, the midline data collection was launched, lasting 11 days through 14th August. Over the 3 days following the completion of data collection, in an attempt to reduce attrition rates as much as possible, enumerators made follow up visits to mothers who had been unavailable during the first visit. At the same time, the data cleaning process began and was finalized by 7th September. Finally, data analysis was conducted over the course of the following week and completed by 13th September. The first draft of the midline report was then

[1] For full list of indicators and sub-indicators, please see "Midline Findings" section below.

submitted on 15th September and shared with SCI and Principal Investigators (PIs) for review. Based on comments from IPA partners, the report was revised and a final draft submitted on 25th September.

3.3 Field Team Composition

In preparation for the midline training, IPA recruited a total of 42 field staff, including 4 team leaders, 1 admin/logistics assistant, 1 data assistant, 30 enumerators and 6 quality control staff (or "back-checkers" [1]). Over the course of training and piloting, team leaders and RAs observed the participation of enumerators, noting in particular their mastery of survey skills, question administration, and ability to learn new concepts related to the survey. Before the day of the false start, staffing decisions were finalized according to recommendations from training coordinators. In total, 36 field staff were invited to participate in midline data collection, consisting of 4 team leaders, 1 admin/logistics assistant, 1 data assistant, 24 enumerators and 6 back-checkers. Selected staff was divided among 4 teams; one team leader supervised 8 enumerators and assigned them to respondents based on geographic location (one team per township). Back-checkers and the data assistant were directly managed by RAs, and the logistic/admin staff was managed by the senior team leader.

3.4 Piloting

In order to help refine the questionnaire and finalize team member selection, two separate piloting rounds of data collection were conducted before the "false start" (which can be thought of as a third and final round of piloting). The sample of respondents used for the survey pilot was drawn from treatment and control villages not included as part of the actual midline sample. The first piloting round was conducted in 6 villages from Pakokku Township, while the second round included 8 villages from both Pakokku and Yesagyo Townships. Field teams were assigned to different villages based on village population, and in each pilot village the survey was administered to all eligible mothers using the same criteria as for the full midline sample. Any issues related to field procedures or technical problems with the digital data collection form were documented during piloting and reported to team leaders and RAs in the evenings. This allowed RAs, in consultation with PIs and the Research Manager, to make appropriate adjustments to data collection procedures in advance of the launch of data collection.

3.5 Description of the Sample

From the census/listing survey undertaken by IPA in Spring of 2017, a list of all mothers who experienced pregnancy in 2016 was compiled from 70% of study villages[2] (see details below). Using this initial list of women as the sampling frame, we restricted the criteria further to include only those women who were between 4 and 9 months pregnant as of April 2016 (i.e. eligible for LEGACY enrollment at the time of program inception; gestation age was calculated based primarily on child birthday[3]). This resulted in the selection of a final midline sample size of 1,451 women. In the end, however, 144 mothers (7.9%) were not surveyed during the data collection as they were not present or unavailable during survey team visits. The most common reason for the cases of attrition was the relocation to another village, either temporarily for work or permanently to live with other family members. Thus only 1,337 mothers responded to the survey questions, and among these 2 mothers replied that they did not experience any pregnancy in 2016.[4] Therefore, though most of the mother level indicators included in the study are based on a total sample of 1,337 mothers, the child level indicators are taken only from those 1,335 mothers who reported one or more 2016 pregnancies.

[1] Back-checkers were responsible for monitoring data quality. By returning to a random selection of respondents three to 5 days after the initial survey was conducted, they were able to verify that surveys were being administered correctly.
[2] Midline sample includes only villages in Tranches 1, 2, and 3. Tranche 4 villages were not included in the midline sample, as these villages did not receive the LEGACY intervention at the same time as Tranches 1, 2, and 3.
[3] Using self-reported gestation age was avoided wherever possible, due to the unreliable nature of this measurement.
[4] It is unclear how this could be the case, since all women included in this listing reported a 2016 pregnancy just a few months ago during our census/listing exercise.

Among the 1,335 women who experienced pregnancy in 2016, 22 mothers reported being currently pregnant as well (at the time of data collection). All 1,335 women were pregnant at least once in 2016, while 5 of these women experienced 2 pregnancies over the course of the year.[1] Of all the pregnancies reported in 2016, only 11 did not end in live birth, with 5 women reporting a stillbirth, and 6 reporting miscarriage. Additionally, a total of 16 mothers reported giving birth to twins. Thus in the delivery, postnatal care, and newborn care related indicators, the total sample consists of 1,344 under two children from the full sample of 1,355 mothers.

Table 1: Sample Distribution Figures

Midline Sample	**Midline**		**Baseline**	
	No.	% of total	No.	% of total
Total Midline Sampling Frame (2016 pregnant mothers)	1451			
Final Study Sample	1337	92.14		
Attrition	114	7.86		
Attrition Type				
Temporarily out of reach	11	0.76		
Moved temporarily (for work)	46	3.17		
Moved permanently	7	0.48		
Lives with spouse's family	5	0.34		
Moved temporarily (for other reason)	6	0.41		
Working in the field	2	0.14		
Exited from program (still lives in project township)	1	0.07		
Exited from program (lives outside project township)	8	0.55		
Other	28	1.93		
Child Age Distribution				
Total No. live births	1,344			
Child deaths after delivery	4			
Total (0 to 23 months) child sample	1,340		1,274	
0 to 5 months	9	0.67	631	49.53
6 to 8 months	7	0.52	91	7.14
6 to 9 months	25	1.87	129	10.13
6 to 11 months	515	38.43	199	15.62
6 to 23 months	1,331	99.33	643	50.47
9 to 23 months	1,324	98.81	552	43.33
12 to 15 months	777	57.99	116	9.11
12 to 17 months	814	60.75	192	15.07
18 to 23 months	2	0.15	213	16.72
20 to 23 months	1	0.07	125	9.81

3.6 Limitations

Because of budget and time constraints, not all respondents from the baseline survey were included in midline data collection, as we limited our sample frame to 70% of all RCT and Government Model villages from the outset (i.e. 30% of villages from baseline, randomly selected, were not revisited during midline data collection). In addition, the midline listing of mothers was taken from the census/listing conducted by IPA in early 2017, which differed from the original list of mothers that was used to construct the baseline sample. The decision to conduct the census/listing exercise in the first place was based on the discovery of an imbalance of pregnancy rates between treatment and control groups, prompting researchers to suspect some degree of bias inherent in the baseline sample. In fact more mothers in the treatment group compared to the control reported to be around 4 months of gestation. By conducting a relisting of all pregnant women from study villages, IPA hoped to rectify this bias during midline (and for future endline) assuring that treatment

[1] Since the number of current pregnancies (and second pregnancies of 2016) is so small, we've restricted midline analysis to look only at first pregnancies of 2016.

and control groups were balanced on average before the intervention started. Furthermore, the midline survey was administered only to women who were 4 to 9 months pregnant at the time of LEGACY inception to make sure that all mothers in treatment and control had similar gestation age before the inception of the program (in April 2016). In the end, some mothers from the baseline sample have been included in midline data collection while some have not. Additionally, the children that make up the midline sample differ significantly from baseline, as many new children have been born within study villages since the end of baseline data collection.

Due to the fundamental differences between the baseline and midline samples, any comparisons of indicators between the two time periods should be made with caution. Though such comparisons can be illustrative in highlighting general trends in study villages over the past year, they should not be used to draw conclusions about program impact. For such preliminary findings on program impact, we will look instead to Treatment/Control comparisons using midline data alone. However, since budget and time constraints forced us to reduce sample size to 70% of all RCT and Gov. Model villages, it is important to note that our midline analysis may be too underpowered to detect significant treatment effects in some indicators.

Regarding the questionnaire itself, the survey instrument used during midline was drawn almost exclusively from the baseline instrument, with the only addition being a module on cash transfer spending behavior. All modules not relevant to midline reporting indicators (e.g. anthropometric data, consumption, household characteristics) were removed from the midline questionnaire. Additionally, some specific questions from the baseline survey were modified to accommodate changes to some standard indicators and allow for more accurate measurement of existing indicators. For example, the 24-hour diet recall questions were changed slightly to reflect the addition of a tenth food group to the standard dietary diversity score indicator. Also, the recall period for childhood illness exposure was changed from an indefinite time period to 2 weeks. Therefore, some indicators in midline are not be directly comparable with baseline data.

3.7 Data Analysis Methodology

All survey data was collected on tablets using SurveyCTO software, which ensures secure end-to-end storage and transfer of data, making it extremely difficult to manipulate data between time of collection and download onto IPA computers. IPA also has a standard protocol for checking data quality and consistency, which was executed on a daily basis over the course of data collection. Based on the results of these data quality checks, Research Associates at IPA made daily corrections to survey data in the event of obvious and erroneous outliers, blank responses, and duplicate responses. After downloading the final raw dataset from SurveyCTO servers upon the conclusion of data collection, IPA staff conducted standard cleaning and formatting procedures, including: dropping duplicate observations, re-coding missing and "other" responses, and winsorizing[1] any remaining outliers.

After generating any necessary composite or secondary indicators, IPA produced summary statistic[2] tables of all indicators (see Annex 1) and provided comparisons to baseline data wherever possible. Additionally, we have generated preliminary treatment/control t-test tables comparing sample means between 1) All RCT treatment villages & Control villages, 2) RCT Treatment 1 villages & Control villages, 3) RCT Treatment 2 villages & Control villages, 4) Government model Treatment villages & Government model Control villages (see Annex 3 & 4). Following the level of randomization, the t-tests between treatment 1 and 2 and control were generated using a Fixed Effects analysis with standard errors clustered at the triplet cluster[3] level. T-test between the government and control villages clustered standard errors at the village level. All data cleaning and analysis was conducted using Stata SE software (release 14).

[1] Any observations lower than the 1st percentile or higher than the 99th percentile are replaced with the value observed at the 1st or 99th percentiles respectively.
[2] Mean, Standard Deviation, Minimum, Maximum, and Number of Observations
[3] The unit of randomization in this study, consisting of three separate villages, matched based on their proximity to a government health clinic.

Midline Findings

4.1 Treatment/Control Comparison

Due to the previously discussed issues of comparability between baseline and midline samples (see section 3.6), any differences in indicators between the two time periods do not represent the impacts of the LEGACY program. While comparisons between baseline and midline averages are illustrative in highlighting general trends among the population, we should avoid using these results to draw any definitive conclusions about program impact.[1]

For a more valid interpretation of program impact at midline, we compare sample means between treatment and control groups using a standard t-test,[2] allowing us to make inferences based on statistical significance.[3] For this analysis, we run three separate comparison tests on sample means for all key reporting indicators:

1. All RCT treatment villages v. All RCT control villages (excl. Government Model villages)
2. RCT Treatment 1 villages[4] v. All RCT control villages
3. RCT Treatment 2 villages[5] v. All RCT control villages
4. Government Model Treatment villages v. Government Model Control Villages

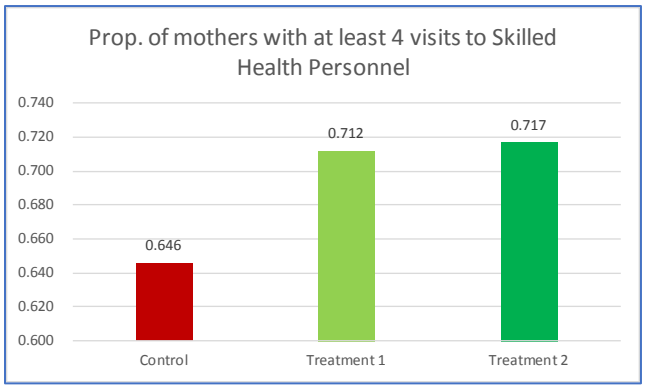
Running tests on both single and combined treatment groups allows us to draw conclusions about overall program impact, while also providing comparisons between the relative impacts of the two treatment arms. The latter comparison is important as a means of isolating the impact of the BCC as a supplement to monthly cash transfers. We also run separate tests on government model villages in order to compare the two cash transfer distribution mechanisms (government distribution vs. MFI distribution). Some key results of the treatment/control tests are highlighted below, while full t-test output can be found in Annex 3 & 4.

Antenatal, Delivery, Postnatal, and Newborn Care Practices

At midline we did not expect to see many significant changes to indicators of health seeking behavior with respect to antenatal through newborn care practices. All mothers included in the midline sample gave birth within 5 months of program inception, meaning that any impact on these indicators would have had to occur within a very short time window. For the most part, this expectation is borne out by the data. Within antenatal care, the only area we see some positive impact is in the proportion of women with at least 4 visits to a skilled health personnel (see Figure 1), amounting to a ~7 percentage point difference between treatment and control (with a slightly stronger impact in Treatment 2 villages). In the proportion of mothers with at least one visit to a skilled health personnel, however, we see negative or no impact for both treatment groups as well as government villages. We observe the same negative or neutral impact for delivery and postnatal care indicators. Newborn care indicators convey slightly stronger results, with a significant and sizable increase in the proportion of mothers taking at least one visit with skilled health personnel, but this impact is only observed in Treatment 1.

[1] See section 4.2 for a comparison of midline and baseline means.
[2] Comparison of sample means, with village cluster Fixed Effects and clustered standard errors at the "triplet cluster" level. The "triplet cluster" is the unit of randomization in this study.
[3] Due to budget and time constraints on midline data collection, only 70% of RCT study villages were surveyed, meaning that original calculations of Minimum Detectable Effect (MDE) will need to be adjusted for the smaller sample size. It is possible that some program impacts are still too small at midline to be detected in this analysis. If present, these effects will hopefully be realized at end line. For Government Model villages, the entire sample was surveyed during midline, so MDE calculations will not be affected. Overall, though, the government model sample is likely too small to be able to pick up many significant results at midline.
[4] Treatment 1 villages received the "Cash + heavy BCC" intervention.
[5] Treatment 2 villages received the "Cash + light BCC" intervention.

Figure 1: Standard ANC visit with skilled health personnel

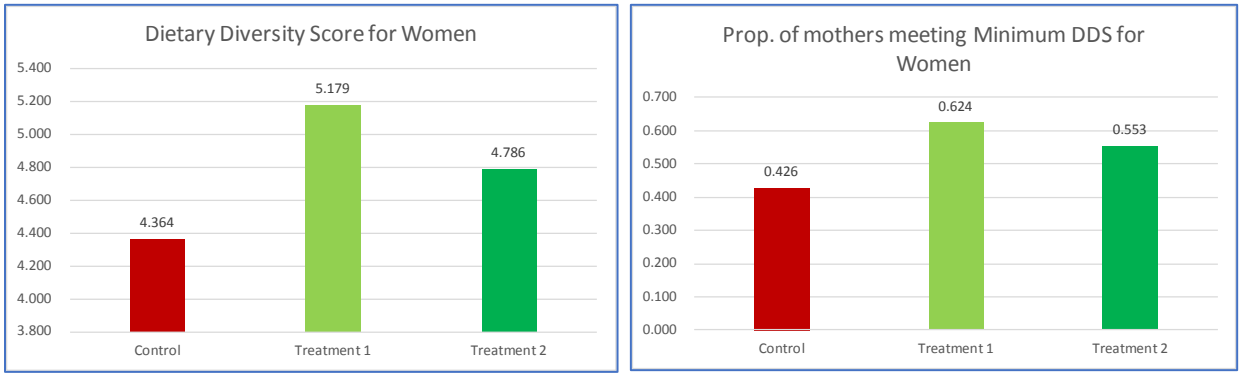


There is one major exception to the general pattern of null results in these behavioral indicators: the average amount of money spent on delivery costs is significantly lower in all treatment villages compared to control villages, and even more significant is the change in the percentage of mothers who had to borrow money in order to cover these costs. This effect would seem to be a direct result of the increase in disposable cash provided by the cash transfer, and is strongest among Treatment 2 villages, where we observe a full 25 percentage point reduction in the prevalence of borrowing.

Dietary Diversity Score for Women

This group of indicators shows exceptionally promising evidence of the LEGACY program's impact on dietary and nutrition behaviors. In dietary diversity scores, there is an observed difference of over 0.8 points in Treatment 1, 0.4 points in Treatment 2, and 0.6 points for Treatments 1 & 2 combined. The proportion of respondents who meet the minimum score threshold is also impacted significantly, with a 20 percentage point increase observed in Treatment 1, a nearly 13 point increase in Treatment 2, and a nearly 17 point increase overall (see Figure 2). All results are significant to a level of at least 1 percent. Notably, government model villages show no significant impact, but this is most likely due to the small sample size rather than an actual failure on the part of government model villages to achieve the same level of change.

Figure 2: Dietary Diversity Score and Minimum DDS for Women



Infant and Young Child Feeding Practices (IYCF)

IYCF indicators are another area in which program impact is already very apparent at midline. With the exception of exclusive and predominant breastfeeding, for which the number of observations is too small to observe any significant effects,[1] nearly every indicator reflects a large and statistically significant impact. For example, the proportion of children receiving a minimum acceptable diet increased by nearly 30 percentage points in Treatment 1, from 9.9 percent of children all the way up to 41.7 percent (see Figure 6). In general, the impact on IYCF indicators is stronger in Treatment 1 than Treatment 2, indicating that extensive education programs play an important role in effecting nutrition behavior change. Changes to complementary feeding indicators in particular are so strong that we even detect significant impacts in the small sample of government treatment villages.

Figure 3: Early Initiation of Breastfeeding

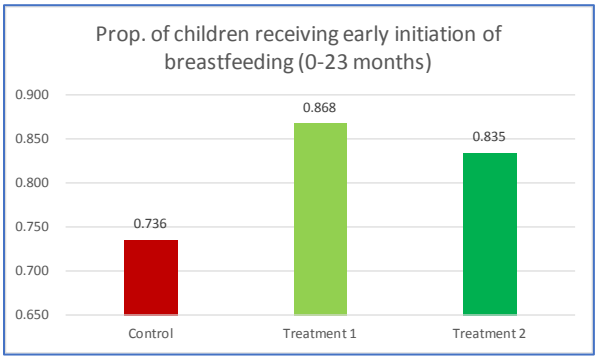
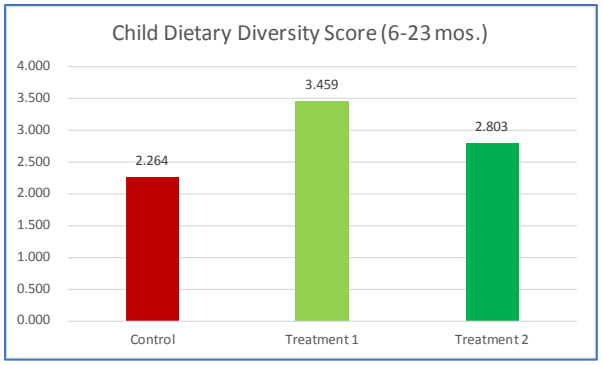
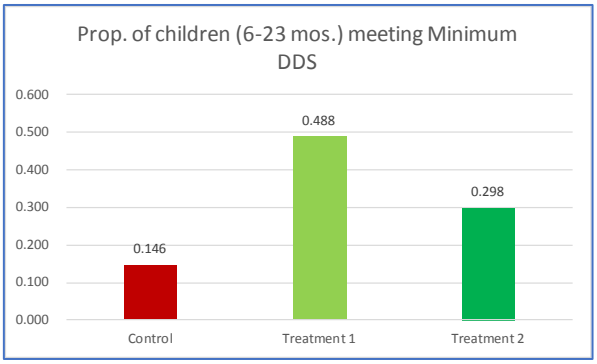


Figure 4: Child Dietary Diversity Score





[1] Since the exclusive breastfeeding indicator (for 0-6-month-old infants) is based on a 24-hour recall, this question could only be administered to mothers with children under 6 months old at midline, of which there were only nine in our sample.

Figure 5: Minimum Meal Frequency

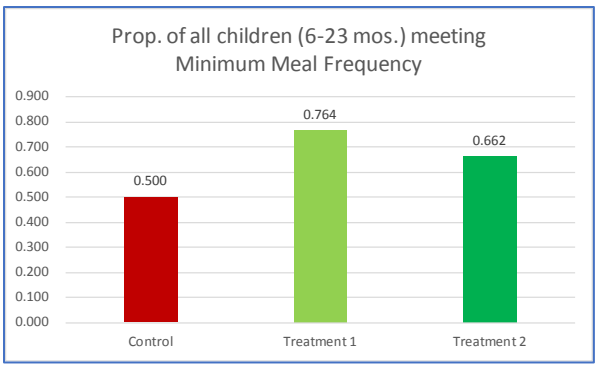
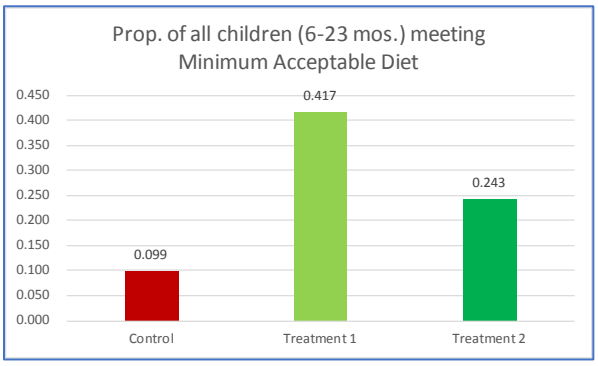


Figure 6: Minimum Acceptable Diet



Childhood Illness and Health Seeking Behavior

Similar to what we observe for antenatal and postnatal care indicators, there are few significant treatment effects to be found among childhood illness and related health seeking behavior indicators. Again, this is probably a reflection of the fact that the window for substantial behavior change is simply too short at midline. There are a handful of statistically significant results to be found (e.g. the proportion of Treatment 2 children with pneumonia seeking treatment from a skilled health personnel), but the overwhelming trend among these indicators is one of no impact. When it comes to treatment cost, on the other hand, we again see a significant decrease in the proportion of respondents who borrowed money in order to pay for healthcare. In Treatment 1, the proportion of mothers who reported taking out a loan is 1/3 of the proportion of borrowers in control. This result is a hopeful indication that debt levels may be decreasing overall in program areas.

Knowledge of Infant & Young Child Feeding Practices

Since we observed such strong treatment effects in the IYCF indicators, it should come as no surprise that knowledge of IYCF among respondents has also been significantly impacted as a result of LEGACY. General knowledge about breastfeeding is significantly greater in both treatment groups, while complementary feeding awareness seems to have only increased in Treatment 1. On average, across all knowledge indicators, the proportion of mothers who answered the relevant questions from the survey accurately is approximately 10 percent larger in treatment than control. The impact is generally stronger for Treatment 1 than Treatment 2, but the difference is not as pronounced as might be expected, given the obvious connection between knowledge increase and BCC/education programs.

Water, Sanitation, and Hygiene (WASH)

Among the key WASH reporting indicators, there is very little evidence that the program has had any noticeable impact at midline. Besides a marginal increase in the proportion of households using soap for handwashing (~2 percent) within Treatment 1 villages, no other indicator that we looked at shows any significant treatment effect.

4.2 Key Summary Statistics

As discussed previously, a straight comparison of midline results with baseline results is not a reliable measure of program impact, but can still provide context for general trends over the past year in program areas. In the following section, we run through this comparison for intervention villages at midline. That is, midline figures are restricted to intervention villages only (T1, T2, and gov.), while baseline figures cover the entire baseline sample.[1] By restricting the midline sample in this way, we are able to focus on the yearlong trends that have occurred in areas of LEGACY implementation only, rather than broader trends across the entire region.

Antenatal, Delivery, Postnatal, and Newborn Care Practices

The 3MDG Maternal, Newborn and Child Health Indicator guidelines (2013) provide the basis for indicators included in these sections. At midline, we observe that nearly all respondents (99 percent) sought some form of Antenatal Care (ANC) in 2016. On average, respondents visited a "Skilled Health Personnel" 5.34 times over the past year, and 71 percent of women reported at least 4 visits.[2] Compared to baseline indicators, we observe a slight increase, though figures were relatively high at baseline as well, with 96 percent of respondents receiving some form of ANC care, and an average of 4.7 visits with a skilled health personnel. At midline, the proportion of mothers making at least 4 visits to a skilled health personnel has increased significantly, however, from a baseline value of 57 percent.

With regard to delivery care, the proportion of deliveries attended by a skilled health personnel increased to 84 percent (compared to 72 percent at baseline), and institutional deliveries[3] were reported by 49 percent of our midline sample, up from 31 percent at baseline. In addition, 53 percent of mothers made at least one postnatal care (PNC) visit with a skilled health personnel, and 52 percent made at least one newborn care (NBC) visit with a skilled health personnel (including community health workers and auxiliary midwives).

Table 2: Antenatal – Newborn Care Summary Statistics[4]

[1] See Annex 2 for a complete comparison of all program indicators using the same sample (restricted to intervention villages at midline). See Annex 1 for a comparison of all program indicators using the entire midline and baseline samples. See Annex 3 for a comparison of all program indicators in which the midline sample is restricted to control villages only (incl. gov. model control villages).

[2] "Skilled Health Personnel" includes doctors (both government and private), health assistants, lady health visitors, and midwives.

[3] Delivery by skilled health personnel at a hospital, clinic, or delivery room.

[4] Due to an issue in the wording of both the baseline and midline questionnaires, we are not able to calculate the number of visits made to "skilled health personnel" for postnatal and newborn care (PNC and NBC), only the total number of visits to all health care providers. For this reason, the number and percentage of mothers who made at least 4 visits to a skilled health personnel for PNC and NBC is not available in our analysis. However, we were able to calculate the number of mothers making at least one visit to a skilled health personnel for PNC and NBC, which itself is one of 3MGs primary indicators.

SECTION 2: SELF-REPORTED ANTENATAL CARE PRACTICES (FIRST PREGNANCY 2016)	Midline					Baseline		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
ANC Visits								
Prop. of mothers receiving ANC	0.99	0.079	0	1	954	0.96	0.19	2846
No. of visits with skilled Health Personnel	5.34	2.60	0	10	954	4.70	3.62	2846
Prop. of mothers with at least 4 visits to Skilled Health Personnel	0.71	0.45	0	1	954	0.57	0.50	2846
Prop. of mothers with at least 1 visit to Skilled Health Personnel	0.99	0.12	0	1	954	0.93	0.25	2846

SECTION 3: SELF-REPORTED DELIVERY CARE PRACTICES (FIRST PREGNANCY 2016)	Midline					Baseline		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Delivery with Skilled Health Personnel								
Prop. of deliveries attended by Skilled Health Personnel	0.84	0.37	0	1	949	0.72	0.45	2837
Prop. of home deliveries attended by Skilled Health Personnel	0.35	0.48	0	1	949	0.4	0.49	2837
Prop. of deliveries at health care facility with trained health professional	0.49	0.50	0	1	949	0.31	0.46	2837

SECTION 4: SELF-REPORTED POST NATAL CARE PRACTICES (FIRST DELIVERY 2016)	Midline					Baseline		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
PNC Visit with Skilled Health Personnel								
Prop. of mothers receiving PNC within 6 weeks of delivery	0.56	0.50	0	1	948	0.61	0.5	2791
No. of PNC visits with a Skilled Health Personnel	0.85	1.15	0	7	948	2.21	2.87	2791
Prop. of mothers receiving at least one PNC check with a Skilled Health Personnel	0.53	0.50	0	1	948	0.5	0.5	2791

SECTION 5: SELF-REPORTED NEWBORN CARE PRACTICES (FIRST PREGNANCY 2016)	Midline					Baseline		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
NBC Visit with Skilled Health Personnel								
Prop. of mothers receiving Newborn Care	0.52	0.50	0	1	943	0.59	0.5	2828
Number of NBC visits with Skilled Health Personnel or CHW/AMW	0.78	1.09	0	8	943	2.3	2.88	2826
Prop. of mothers having at least one NBC visit with Skilled Health Personnel or CHW/AMW	0.52	0.50	0	1	943	0.53	0.5	2826

Dietary Diversity Score for Women

According to Minimum Dietary Diversity for Women (MDD-W) guidelines,[1] any woman reporting consumption of at least five out of a possible ten food categories (within the last 24 hours) is considered to meet the minimum dietary diversity score. The average MDD-W in our midline sample is 4.89 and 57 percent of respondents meet the standard for minimum dietary diversity. This figure cannot be directly compared with baseline, as the guidelines for measuring dietary diversity have changed since the time of the baseline survey. Previously, dietary diversity (as determined by Women Dietary Diversity Score, or WDDS, guidelines) was based on 9 food groups instead of 10, and the minimum score cutoff was set according to the mean score of the sample population.[2] According to these guidelines, the average WDDS for baseline respondents was 4.3 and 46 percent of scores were equal to or greater than the sample mean. We've also calculated midline WDDS using the old method in order to produce a figure that's comparable to baseline (See Table 3 below).

Table 3: Mother Dietary Diversity Summary Statistics

SECTION 6: MOTHER DIETARY DIVERSITY	Midline					Baseline		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Mothers' Food Consumption by food group (24 hr recall)								

[1] A Guide to Measurement: Minimum Dietary Diversity for Women, (FAO and FANTA, 2016)
[2] Guideline for Measuring Household and Individual Dietary Diversity, (FAO, 2013)

Prop. of mothers reporting Grain cons.	1	0	1	1	955			
Prop. of mothers reporting Vit. A rich Vegetable cons.	0.73	0.45	0	1	955			
Prop. of mothers reporting Vitamin A rich Fruit cons.	0.35	0.48	0	1	955			
Prop. of mothers reporting Other Fruit cons.	0.16	0.37	0	1	955			
Prop. of mothers reporting Other Vegetable cons.	0.68	0.47	0	1	955			
Prop. of mothers reporting Meat cons.	0.75	0.43	0	1	955			
Prop. of mothers reporting Egg cons.	0.30	0.46	0	1	955			
Prop. of mothers reporting Pulse cons.	0.66	0.48	0	1	955			
Prop. of mothers reporting Nut cons.	0.23	0.42	0	1	955			
Prop. of mothers reporting Dairy cons.	0.046	0.21	0	1	955			
Women Dietary Diversity Score (9 food groups)								
Dietary Diversity Score for Women	4.64	1.25	1	9	955	4.27	1.34	1133
Prop. of mothers meeting minimum DDS for Women (above or equal to sample mean)	0.48	0.5	0	1	955	0.46	0.5	4362
Women Dietary Diversity Score (10 food groups)								
Dietary Diversity Score for Women	4.89	1.46	1	10	955			
Prop. of mothers meeting Minimum DDS for Women	0.57	0.50	0	1	955			

Infant and Young Child Feeding Practices (IYCF)

The WHO/UNICEF standards on infant and young child feeding practices were used to calculate all breastfeeding and complementary feeding indicators in this survey.[1] Because of the nature of the sample, and the timing of the midline survey, only nine children under 6 months of age were included in the midline survey. Since the standard indicator for exclusive breastfeeding uses a 24-hour recall window, there are therefore very few observations available for this indicator, as only nine mothers were eligible to answer this question.

Table 4 below gives detailed results for key infant and young child feeding practice indicators. At midline, 83 percent of mothers reported that they had practiced early initiation of breastfeeding[2] in 2016, compared with 74 percent at baseline. For exclusive breastfeeding[3] we notice the opposite trend, as only 40 percent of < 6-month-old children received exclusive breastfeeding in midline (compared with 63 percent at baseline).

Compared with exclusive breastfeeding, complementary feeding indicators prove to be a much richer source of data, since our midline sample contains a much greater proportion of 6 to 23-month-old children compared to < 6-month-old infants. 37 percent of children from the midline sample met the minimum dietary diversity requirement (reporting 4 or more different food groups, out of a possible 7, in their diet over the last 24 hours), compared with 28 percent of children at baseline. The same pattern of improvement was detected in the minimum meal frequency indicator[4] as 71 percent of children met the minimum meal frequency at midline compared to 66 percent at baseline. Finally, looking at minimum acceptable diet,[5] the data for all children (6 to 23 months) shows that 31 percent of children at midline achieved the minimum acceptable level, while only 21 percent of all children from baseline reported the same.

Table 4: IYCF Summary Statistics

SECTION 7: SELF-REPORTED INFANT & YOUNG CHILD FEEDING PRACTICES	**Midline**	**Baseline**

[1] Indicator for Assessing Infant and Young Child Feeding Practices: Part 2, Measurement (WHO, 2008)

[2] Any mother who initiates breastfeeding within one hour of birth is said to practice early initiation of breastfeeding.

[3] In the questionnaire, we ask respondents with children aged 0-6 months if they've given their child any food or drink besides breastmilk in the last 24 hours. A "No" response qualifies that respondent as practicing exclusive breastfeeding.

[4] Minimum meal frequency is defined as the proportion of breastfed and non-breastfed children 6 to 23 months of age who receive solid, semisolid, or soft foods (including milk products for non-breastfed children) more often than or equal to the minimum acceptable daily frequency, which is defined as follows: two meals per day for breastfed children 6 to 8 months of age, 3 meals per day for breastfed children 9 to 23 months of age, and 4 meals per day for non-breastfed children 6 to 23 months of age.

[5] Minimum acceptable diet is defined as the proportion of children 6 to 23 months of age who receive a minimally acceptable diet including the recommended number of meals and/or milk feedings (depending on their age and breastfeeding status) and foods from at least 4 food groups. This is a combination of the minimum dietary diversity and minimum meal frequency indicators.

	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Breastfeeding								
Prop. of children receiving early initiation of breastfeeding (0-23 months)	0.83	0.37	0	1	948	0.74	0.44	1254
Prop. of children receiving exclusive breastfeeding (0-5 months)	0.40	0.55	0	1	5	0.63	0.48	623
Prop. of children receiving predominant breastfeeding (0-5 months)	0.40	0.55	0	1	5	0.76	0.43	623
Prop. of children aged 12 to 15 months still breastfeeding	0.96	0.21	0	1	556	0.89	0.32	115
Prop. of children aged 20 to 23 months still breastfeeding	.	.	.	.	0	0.69	0.47	156
Complementary Feeding								
Prop. of children aged 6 to 9 months receiving timely complementary feeding	0.94	0.24	0	1	17	0.88	0.32	129
Prop. of children aged 6 to 8 months receiving semi-solid food	1	0	1	1	5	0.94	0.24	85
Child (6-23 months) Food Consumption by food group (mother's 24 hr recall)								
Prop. of children reporting Grain cons.	0.97	0.17	0	1	949	0.95	0.23	634
Prop. of children reporting Pulse & Nut cons.	0.50	0.50	0	1	949	0.35	0.48	634
Prop. of children reporting Dairy cons.	0.095	0.29	0	1	949	0.088	0.28	634
Prop. of children reporting Meat & Fish cons.	0.53	0.50	0	1	949	0.32	0.47	634
Prop. of children reporting Egg cons.	0.35	0.48	0	1	949	0.32	0.47	634
Prop. of children reporting Vit. rich Vegetable & Fruit cons.	0.42	0.49	0	1	949	0.46	0.50	634
Prop. of children reporting Other Vegetable & Fruit cons.	0.20	0.40	0	1	949	0.18	0.39	634
Child Dietary Diversity Score								
Child Dietary Diversity Score (6-23 mos.)	3.06	1.39	0	7	949	2.67	1.45	634
Prop. of children (6-23 mos.) meeting Minimum DDS	0.37	0.48	0	1	949	0.28	0.45	634
Child Minimum Meal Frequency								
Prop. of breastfeeding children (6-8 mos.) meeting Minimum Meal Frequency	1	0	1	1	5	0.75	0.44	88
Prop. of breastfeeding children (9-23 mos.) meeting Minimum Meal Frequency	0.72	0.45	0	1	863	0.65	0.48	432
Prop. of breastfeeding children (6-23 mos.) meeting Minimum Meal Frequency	0.72	0.45	0	1	868	0.67	0.47	520
Prop. of non-breastfeeding children (6-23 mos.) meeting Minimum Meal Frequency	0.58	0.50	0	1	24	0.61	0.49	113
Prop. of all children (6-23 mos.) meeting Minimum Meal Frequency	0.71	0.45	0	1	892	0.66	0.48	633
Child Minimum Acceptable Diet								
Prop. of breastfeeding children (6-23 mos.) meeting Minimum Acceptable Diet	0.32	0.47	0	1	868	0.2	0.4	520
Prop. of non-breastfeeding children (6-23 mos.) meeting Minimum Acceptable Diet	0.042	0.20	0	1	24	0.27	0.45	113
Prop. of all children (6-23 mos.) meeting Minimum Acceptable Diet	0.31	0.46	0	1	892	0.21	0.41	633
Prop. of all children (6-11 mos.) meeting Minimum Acceptable Diet	0.28	0.45	0	1	343	0.05	0.22	198
Prop. of all children (12-17 mos.) meeting Minimum Acceptable Diet	0.33	0.47	0	1	548	0.26	0.44	191
Prop. of all children (18-23 mos.) meeting Minimum Acceptable Diet	0	.	0	0	1	0.3	0.46	244

Childhood Illness and Health Seeking Behavior

Table 5 below summarizes the results of self-reported data on childhood illness and health seeking behavior. At midline, 39 percent of children in the sample experienced some sort of illness in the previous two weeks,

compared to 24 percent at baseline. Among those 39 percent who reported recent illness at midline, 7 percent suffered from diarrhea, while 16 percent experienced pneumonia. At baseline, however, 8.3 percent of reported illness was attributed to diarrhea, while 12 percent was attributed to pneumonia. In terms of health seeking behavior, the key reporting indicator is the proportion of sick children who seek treatment for their illness, for which we see an improvement of 13 percentage points between baseline and midline (increasing from 76 to 89 percent).

Table 5: Child Illness Summary Statistics

SECTION 8: SELF-REPORTED CHILD HEALTH SEEKING BEHAVIOUR	**Midline**					**Baseline**		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Childhood Illness								
Prop. of children experiencing any type of illness in the last two weeks	0.39	0.49	0	1	954	0.24	0.43	3220
Prop. of children experiencing diarrhea in the last two weeks	0.070	0.26	0	1	370	0.083	0.28	779
Prop. of children experiencing pneumonia in the last two weeks	0.16	0.37	0	1	370	0.12	0.32	779
Prop. of children experiencing fever in the last two weeks	0.71	0.45	0	1	370	0.73	0.44	779
Prop. of children experiencing other illnesses in the last two weeks	0.019	0.14	0	1	370	0.071	0.26	779
Primary advice or treatment for Childhood Illness								
Prop. of children experiencing illness who sought treatment	0.89	0.32	0	1	370	0.76	0.43	779

Knowledge of Infant & Young Child Feeding Practices

In addition to directly measuring child feeding practices, both the baseline and midline survey questionnaires asked supplementary questions about mothers' knowledge of child feeding standards. In all of these indicators we observe significant increases in general knowledge between baseline and midline. For example, though at baseline only 79 percent of mothers knew of the optimal time to initiate breastfeeding, by midline this proportion had increased to 96 percent. Similarly, the proportion of mothers who knew the correct definition of exclusive breastfeeding increased from 77 to 92 percent between baseline and midline. Finally, the largest observed knowledge increase at midline can be found in the proportion of mothers who know the optimal length of breastfeeding, increasing from 29 to 80 percent.

Table 6: IYCF Knowledge Summary Statistics

SECTION 9: KNOWLEDGE OF INFANT & YOUNG CHILD FEEDING PRACTICES	**Midline**					**Baseline**		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Key IYCF Practices								
Prop. of mothers who know the best time to initiate breastfeeding	0.96	0.20	0	1	955	0.79	0.41	5413
Prop. of mothers who responded "Don't Know"	0.027	0.16	0	1	955	0.13	0.34	5413
Prop. of mothers who have heard about Exclusive Breastfeeding	0.99	0.11	0	1	955	0.94	0.25	5413
Prop. of mothers who responded "Don't Know"	0.0084	0.091	0	1	955	0	0	5413
Prop. of mothers who know the meaning of Exclusive Breastfeeding	0.92	0.28	0	1	955	0.77	0.42	5413
Prop. of mothers who responded "Don't Know"	0.081	0.27	0	1	955	0.14	0.34	5413
Prop. of mothers who know the optimal length of Breastfeeding	0.80	0.40	0	1	955	0.29	0.45	5413
Prop. of mothers who responded "Don't Know"	0.024	0.15	0	1	955	0.085	0.28	5413

Water, Sanitation, and Hygiene (WASH)

As another critical measure of good health practices, our survey captured a variety of WASH indicators at both baseline and midline. Latrine usage indicators, for example, show a sizable decrease in occurrence of improved latrine practices between baseline and midline, dropping from 32 to 19 percent. This general indicator seems to obscure some detail in the data, however, since a closer look reveals that the largest decrease occurs in the use of "fly proof" pit latrines. One possible explanation of this dramatic drop in the use of "fly proof" latrines could be seasonality: baseline data collection occurred in May, when flies pose a much greater risk to hygiene than in August, when midline data collection was conducted. Furthermore, when taking into account only the proportion of households using a flush toilet with septic tank, the data shows an increase from 4.1 to 12 percent between baseline and midline. With regards to handwashing and water treatment practices, we also observe general improvement at midline. For example, 90 percent of mothers reported using some kind of water treatment at baseline, which increased to 98 percent at midline. Additionally, 94 percent of mothers at baseline, compared to 98 percent at midline, reported washing their hands with soap. For indicators related to quality of drinking water storage containers, differences between baseline and midline are small, but also follow a generally positive trend.

Table 7: WASH Summary Statistics

SECTION 10: SELF-REPORTED WATER, SANITATION, AND HYGIENE PRACTICES	**Midline**					**Baseline**		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Treatment of Drinking Water								
Prop. of HH applying treatment to drinking water	0.98	0.15	0	1	955	0.90	0.31	5413
Prop. of such HH using boiling as water treatment	0.019	0.14	0	1	934	0.14	0.35	4845
Prop. of such HH adding bleach/chlorine as water treatment	0.033	0.18	0	1	934	0.0099	0.099	4845
Prop. of such HH adding iodine as water treatment	0.0011	0.033	0	1	934	0.0012	0.035	4845
Prop. of such HH using filtration through cloth as water treatment	0.89	0.31	0	1	934	0.75	0.43	4845
Prop. of such HH using water filter (ceramic, sand, etc.) as water treatment	0.066	0.25	0	1	934	0.20	0.40	4845
Prop. of such HH using composite filters as water treatment	0.025	0.16	0	1	934	0.013	0.11	4845
Prop. of such HH using sedimentation as water treatment	0.065	0.25	0	1	934	0.075	0.26	4845
Prop. of such HH that did not apply any particular water treatment method	0.013	0.11	0	1	934	0.0045	0.067	4845
Prop. of such HH using some other water treatment method	0.022	0.15	0	1	934	0.032	0.18	4845
Latrine Usage								
Prop. of HH using water flush toilet with septic tank	0.12	0.32	0	1	955	0.041	0.2	5392
Prop. of HH using water flush toilet without tank	0.037	0.19	0	1	955	0.017	0.13	5392
Prop. of HH using pit latrine (fly proof)	0.085	0.28	0	1	955	0.34	0.47	5392
Prop. of HH using pit latrine (not fly proof)	0.61	0.49	0	1	955	0.4	0.49	5392
Prop. of HH practicing open defecation	0.14	0.35	0	1	955	0.19	0.39	5392
Prop. of HH using some other type of latrine	0.0031	0.056	0	1	955	0.017	0.13	5392
Prop. of HH using improved sanitation/latrine practices	0.19	0.39	0	1	955	0.32	0.46	5392
Water Storage								
Prop. of HH owning a pot for water storage	0.95	0.21	0	1	955	0.98	0.14	5413

Capacity of storage pot (liters)	50.6	89.1	10	960	912	41.3	59.4	5301
Prop. of such HH with clean pot	0.83	0.37	0	1	912	0.79	0.41	5301
Prop. of such HH having water pot cover	0.61	0.49	0	1	912	0.56	0.50	5301
Prop. of such HH having clean cup for water pot	0.72	0.45	0	1	912	0.71	0.45	5301
Prop. of such HH meeting none of the above conditions	0.034	0.18	0	1	912	0.085	0.28	5301
Handwashing Practices								
Prop. of HH using soap for handwashing	0.98	0.13	0	1	955	0.94	0.23	5413

Cash Transfer Usage

The final module of the midline survey captures behaviors related to the usage of LEGACY cash transfers, which obviously only applies to treatment villages and has no comparison from baseline. Just over half of all midline sample mothers have been enrolled into the LEGACY program (55 percent), and all of these women reportedly withdraw their monthly cash transfers by themselves. In terms of spending decisions, only 0.27 percent of mothers report that their husband makes most of the decisions on how to spend the cash, while the other 99.73 percent report that they make most of the decisions themselves. Overall, food accounts for the largest expenditure category, with the average mother spending nearly 7,000 out of a total 10,000 MMK from the previous month on food, and 88 percent of mothers spent at least some portion of their previous cash transfer on food. The next largest expense category, medical expenses, accounts for only 1/6 of food spending, with an average of just over 1,000 MMK per month.

Table 8: Cash Usage Summary Statistics

SECTION 11: SELF-REPORTED CASH USAGE	**Midline**					**Baseline**		
	Average	sd	min	max	Nb obs	mean	sd	Nb obs
Enrollment in LEGACY Program								
Prop. of mothers enrolled in Legacy program	0.55	0.50	0	1	1337			
Prop. of enrolled mothers that withdraw their monthly cash transfer by themselves	1	0	1	1	735			
Prop. of enrolled mothers that have already exited from the LEGACY program	0.012	0.11	0	1	735			
Decisions about cash usage								
Prop. of enrolled mothers that mostly make their own decisions on cash usage	1.00	0.064	0	1	735			
Prop. of enrolled mothers reporting that their husband mostly makes decisions on cash usage	0.0027	0.052	0	1	735			
Cash usage by Category (MMK)								
Total amount of previous cash transfer	10136.1	1159.3	10000	20000	735			
Amount spent on food expenditure	6921.6	3799.8	0	20000	735			
Amount spent on gifts	15.5	164.2	0	2000	735			
Amount spent on livestock expenditures	5.17	140.2	0	3800	735			
Amount spent on business investment	35.1	476.6	0	7000	735			
Amount spent on water expenses	10.9	246.0	0	6500	735			
Amount spent on medical expenses	1149.5	2315.3	0	10000	735			
Amount spent on school expenses	38.4	456.5	0	7000	735			
Amount spent on debt payment	53.2	471.3	0	5600	735			
Amount spent on transport	2.04	41.2	0	1000	735			
Amount spent on agricultural inputs	0	0	0	0	735			
Amount spent on household items	411.3	1570.9	0	10000	735			
Amount spent on fuel expenses	0	0	0	0	735			
Amount spent on clothing/shoes	509.9	1635.3	0	15000	735			
Amount saved	866.6	2339.6	0	10000	735			
Amount spent on other expenditures	157.7	1027.6	0	10000	735			
Prop. of mothers spending any amount of cash transfer on food	0.88	0.32	0	1	735			

Recommendations and Findings

Overall, the midline survey provides a very valuable opportunity for project planners to learn from 1 year of implementation and adjust programmatic aspects accordingly. Below we summarize the main findings from our analysis of midline data, and provide recommendations for the coming year of LEGACY implementation based on these findings.[1]

5.1 Key Findings

Little evidence of change in maternal health seeking behaviors
In general, midline data shows little evidence of any significant changes to health seeking behavior indicators related to Antenatal through Newborn care practices. It is too early, however, to interpret this to be any failing of the LEGACY program, since we would expect this kind of behavior change to take place over a longer period. Many of these indicators reflect health seeking behaviors from just the first few months of program rollout, which is a very short window within which to observe significant impact. One notable exception to the static trend in this group of indicators is the nearly 7-point increase in the percentage of mothers with at least 4 antenatal visits with a skilled health personnel (both Treatment 1 and 2).

Improved maternal dietary diversity and child complementary feeding practices
Indicators for dietary diversity scores and minimum dietary diversity for both mothers and children, as well as minimum meal frequency, minimum acceptable diet, iron rich food consumption, and early initiation of breastfeeding[2] for children all suggest impressive program impact at midline. Treatment/Control differences of up to 30 percentage points are observed in many of these indicators, for both Treatment 1 and 2, with statistical significance at the 1% level or higher in most cases. On every indicator in this group, larger impacts are observed in Treatment 1, suggesting that BCC has been successful in reinforcing nutrition messaging within program areas.

Much like dietary and IYCF practices, IYCF knowledge indicators[3] show strong treatment effects in both Treatment 1 and 2, also with significance at 1% or greater in most cases, and generally larger effects in Treatment 1 than Treatment 2. This outcome should be expected, given the strong performance of IYCF practice indicators, and supports the theory of change that knowledge transfer leads to behavior change under the right conditions.

No evidence of change in WASH practices
On the other hand, none of the WASH indicators measured at midline suggest any positive impact on hygiene practices. This would suggest that, unlike IYCF knowledge, LEGACY programming has not been as successful at effecting change in this area. However, since we have not measured general knowledge of the "correct" WASH practices, we cannot say whether this is a failing of the program to transfer knowledge effectively, or a failure to transform this new knowledge into behavior change. Indicators measuring childhood illness and associated health seeking behavior similarly show little to no change.

[1] Unfortunately, none of the conclusions on program impact drawn from this report can be extended to government model villages, as the sample of government villages is too small to produce any detectable effects.
[2] No impact is observed on the exclusive breastfeeding indicator, most likely due to small sample size of 0-6-month-old children at midline.
[3] Proportion of mothers who know the best time to initiate breastfeeding, proportion of mothers who know the meaning of exclusive breastfeeding, proportion of mothers who know the optimal length of breastfeeding, and proportion of mothers who know the best time to introduce complementary feeding.

Cash transfers are reducing need to borrow

In terms of cash usage, midline data shows that the overwhelming majority of LEGAY enrollees continue to receive monthly cash transfers in full, and that nearly all of these women are the primary decision makers on spending decisions. In some health seeking behavior indicators (most notably delivery care), we observe a significantly lower proportion of women in treatment villages who have had to borrow money in order to pay for health care, suggesting that LEGACY cash transfers are being used to pay for critical health care needs, and are helping to reduce indebtedness among the target population.

5.2 Recommendations

While findings from our midline evaluation of the LEGACY program are an encouraging sign of positive impact in some key areas, there is definite room for improvement in others. IPA makes the following broad recommendations to help program implementers sustain the successes (and address the shortcomings) of the past year.

1. *Continue to emphasize benefits of healthy nutrition and feeding practices.* The most encouraging results of the midline survey highlight the positive gains in dietary diversity and complementary feeding, but so far we have not measured impact on anthropometric nutrition outcomes. These positive results represent only the first step on the path to improved nutrition outcomes, and if we hope to see eventual reductions in the rates of stunting and wasting, these improvements in dietary practices for mothers and children will need to be sustained.

2. *Place more focus on the importance of ante and postnatal care, sanitation/hygiene practices, and treatment of child illness.* While LEGACY programming has proven to be quite successful in affecting nutrition practices, it seems to have been largely ineffective in changing attitudes surrounding health seeking behavior and hygiene. In the case of antenatal and postnatal care, the lack of any noticeable change may be attributable to the short time window allowed for any measurable impact in these indicators. WASH indicators, on the other hand, have had a full year of exposure to the intervention, but show similar null results. Some adjustment to BCC curriculum, particularly on the topics of WASH and childhood illness, may be necessary.

Annexes

Annex 1: Summary Statistics (Full Sample Comparison)

SECTION 1: RESPONDENT INFORMATION	Midline					Baseline		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Education Level								
Years of Schooling	5.68	3.27	0	17	1337			
Current Pregnancy								
Prop. of Mothers currently pregnant	0.016	0.13	0	1	1337			
Prop. of currently pregnant mothers with ANC card	0.55	0.51	0	1	22			
2016 Pregnancies								
Prop. of mothers experiencing pregnancy in 2016	0.99	0.039	0	1	1337			
Number of pregnancies in 2016	1.00	0.072	0	2	1337			
Prop. of first pregnancies in 2016 resulting in live birth	0.99	0.090	0	1	1335			
No. of children from first pregnancy in 2016	1.01	0.11	1	2	1324			
Child Birth Weight								
Child Birth Weight (lb)	3.19	0.55	0.90	4.90	850	3.21	1.04	1243
Prop. of Low Birth Weight children	0.096	0.30	0	1	850	0.11	0.31	1243
Prop. of children who have valid birth weight record	0.19	0.39	0	1	852	0.2	0.4	1243

SECTION 2: SELF-REPORTED ANTENATAL CARE PRACTICES (FIRST PREGNANCY 2016)	Midline					Baseline		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
ANC Visits								
Prop. of mothers receiving ANC	0.99	0.067	0	1	1335	0.96	0.19	2846
No. of visits with skilled Health Personnel	5.37	2.64	0	10	1335	4.70	3.62	2846
Prop. of mothers with at least 4 visits to Skilled Health Personnel	0.7	0.46	0	1	1335	0.57	0.50	2846
Prop. of mothers with at least 1 visit to Skilled Health Personnel	0.99	0.098	0	1	1335	0.93	0.25	2846
Iron tablet consumption								
Prop. of mothers taking iron tablets	0.97	0.18	0	1	1334	0.90	0.30	2828
No. of iron tablets consumed	155.1	79.9	2	900	1271	136.8	142.9	2760
Prop. of mothers taking at least 180 iron tablets	0.47	0.50	0	1	1271	0.36	0.48	2760
Additional Support During Pregnancy								
Prop. of mothers working during pregnancy	0.47	0.50	0	1	1335	0.49	0.50	2843
Month of pregnancy at which mother stopped work	7.20	1.70	1	9	634	7.28	1.69	1381

Prop. of mothers receiving support with hh chores during pregnancy	0.53	0.50	0	1	1335	0.48	0.50	2844
ANC costs								
Prop. of mothers seeking ANC that paid for treatment	0.47	0.50	0	1	1329	0.29	0.46	2843
Total amount of ANC cost	42187.0	41589.0	500	150000	618	36726.1	59750.7	836
Prop. of mothers paying for ANC who borrowed money to cover the cost	0.27	0.44	0	1	618	0.14	0.34	836
SECTION 3: SELF-REPORTED DELIVERY CARE PRACTICES (FIRST PREGNANCY 2016)			**Midline**				**Baseline**	
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Delivery with Skilled Health Personnel								
Prop. of deliveries attended by Skilled Health Personnel	0.84	0.37	0	1	1329	0.72	0.45	2837
Prop. of home deliveries attended by Skilled Health Personnel	0.34	0.47	0	1	1329	0.4	0.49	2837
Prop. of deliveries at health care facility with trained health professional	0.5	0.5	0	1	1329	0.31	0.46	2837
Delivery costs								
Prop. of mothers paying for delivery costs	0.99	0.077	0	1	1326	0.97	0.17	2830
Total amount of delivery costs	106618.4	99396.4	3500	300000	1318	77758.9	110472	2745
Prop. of mothers paying for delivery who borrowed money to cover costs	0.39	0.49	0	1	1318	0.32	0.47	2745
SECTION 4: SELF-REPORTED POST NATAL CARE PRACTICES (FIRST DELIVERY 2016)			**Midline**				**Baseline**	
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
PNC Visit with Skilled Health Personnel								
Prop. of mothers receiving PNC within 6 weeks of delivery	0.54	0.5	0	1	1328	0.61	0.5	2791
No. of PNC visits with a Skilled Health Personnel	0.83	1.14	0	7	1328	2.21	2.87	2791
Prop. of mothers receiving at least one PNC check with a Skilled Health Personnel	0.51	0.5	0	1	1328	0.5	0.5	2791
PNC visit cost								
Prop. of mothers receiving PNC who paid for care	0.29	0.45	0	1	721			
Total cost of PNC	15093.3	14813.2	500	50000	209			
Prop. of mothers paying for PNC who borrowed money to cover costs	0.2	0.4	0	1	209			
SECTION 5: SELF-REPORTED NEWBORN CARE PRACTICES (FIRST PREGNANCY 2016)			**Midline**				**Baseline**	
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
NBC Visit with Skilled Health Personnel								
Prop. of mothers receiving Newborn Care	0.5	0.5	0	1	1323	0.59	0.5	2828
Number of NBC visits with Skilled Health Personnel or CHW/AMW	0.74	1.05	0	8	1323	2.3	2.88	2826
Prop. of mothers having at least one NBC visit with Skilled Health Personnel or CHW/AMW	0.5	0.5	0	1	1323	0.53	0.5	2826
NBC visit cost								
Prop. of mothers who paid for Newborn Care	0.23	0.42	0	1	658			
Total cost of Newborn Care	37635.8	45626.8	500	140000	151			
Prop. of mothers paying for NBC who borrowed money to cover costs	0.35	0.48	0	1	151			
PNC and NBC visit cost								

Prop. of mothers receiving both PNC and NBC who paid for care	0.36	0.48	0	1	837	0.14	0.35	1675
Total cost of PNC and NBC	28975.4	37660.2	500	190000	305	35827.7	64023.1	242
Prop. of mothers paying for PNC and NBC who borrowed money to cover costs	0.28	0.45	0	1	305	0.3	0.46	242

SECTION 6: MOTHER DIETARY DIVERSITY	**Midline**					**Baseline**		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Mothers' Food Consumption by food group (24 hr recall)								
Prop. of mothers reporting Grain cons.	1	0	1	1	1337			
Prop. of mothers reporting Vit. A rich Vegetable cons.	0.72	0.45	0	1	1337			
Prop. of mothers reporting Vitamin A rich Fruit cons.	0.32	0.46	0	1	1337			
Prop. of mothers reporting Other Fruit cons.	0.15	0.36	0	1	1337			
Prop. of mothers reporting Other Vegetable cons.	0.67	0.47	0	1	1337			
Prop. of mothers reporting Meat cons.	0.70	0.46	0	1	1337			
Prop. of mothers reporting Egg cons.	0.28	0.45	0	1	1337			
Prop. of mothers reporting Pulse cons.	0.63	0.48	0	1	1337			
Prop. of mothers reporting Nut cons.	0.21	0.41	0	1	1337			
Prop. of mothers reporting Dairy cons.	0.040	0.20	0	1	1337			
Women Dietary Diversity Score (9 food groups)								
Dietary Diversity Score for Women	4.48	1.26	1	9	1337	4.27	1.34	1133
Prop. of mothers meeting minimum DDS for Women (above or equal to sample mean)	0.53	0.5	0	1	1337	0.46	0.5	4362
Women Dietary Diversity Score (10 food groups)								
Dietary Diversity Score for Women	4.73	1.46	1	10	1337			
Prop. of mothers meeting Minimum DDS for Women	0.53	0.50	0	1	1337			

SECTION 7: SELF-REPORTED INFANT & YOUNG CHILD FEEDING PRACTICES	**Midline**					**Baseline**		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Breastfeeding								
Prop. of children receiving early initiation of breastfeeding (0-23 months)	0.81	0.39	0	1	1332	0.74	0.44	1254
Prop. of children receiving exclusive breastfeeding (0-5 months)	0.33	0.50	0	1	9	0.63	0.48	623
Prop. of children receiving predominant breastfeeding (0-5 months)	0.44	0.53	0	1	9	0.76	0.43	623
Prop. of children aged 12 to 15 months still breastfeeding	0.95	0.21	0	1	777	0.89	0.32	115
Prop. of children aged 20 to 23 months still breastfeeding	1	.	1	1	1	0.69	0.47	156
Complementary Feeding								
Prop. of children aged 6 to 9 months receiving timely complementary feeding	0.92	0.28	0	1	25	0.88	0.32	129
Prop. of children aged 6 to 8 months receiving semi-solid food	0.86	0.38	0	1	7	0.94	0.24	85
Child (6-23 months) Food Consumption by food group (mother's 24 hr recall)								
Prop. of children reporting Grain cons.	0.96	0.18	0	1	1331	0.95	0.23	634
Prop. of children reporting Pulse & Nut cons.	0.47	0.50	0	1	1331	0.35	0.48	634

Prop. of children reporting Dairy cons.	0.085	0.28	0	1	1331	0.088	0.28	634
Prop. of children reporting Meat & Fish cons.	0.46	0.50	0	1	1331	0.32	0.47	634
Prop. of children reporting Egg cons.	0.31	0.46	0	1	1331	0.32	0.47	634
Prop. of children reporting Vit. rich Vegetable & Fruit cons.	0.36	0.48	0	1	1331	0.46	0.50	634
Prop. of children reporting Other Vegetable & Fruit cons.	0.18	0.38	0	1	1331	0.18	0.39	634
Child Dietary Diversity Score								
Child Dietary Diversity Score (6-23 mos.)	2.83	1.38	0	7	1331	2.67	1.45	634
Prop. of children (6-23 mos.) meeting Minimum DDS	0.30	0.46	0	1	1331	0.28	0.45	634
Child Minimum Meal Frequency								
Prop. of breastfeeding children (6-8 mos.) meeting Minimum Meal Frequency	1	0	1	1	6	0.75	0.44	88
Prop. of breastfeeding children (9-23 mos.) meeting Minimum Meal Frequency	0.65	0.48	0	1	1213	0.65	0.48	432
Prop. of breastfeeding children (6-23 mos.) meeting Minimum Meal Frequency	0.66	0.48	0	1	1219	0.67	0.47	520
Prop. of non-breastfeeding children (6-23 mos.) meeting Minimum Meal Frequency	0.56	0.50	0	1	34	0.61	0.49	113
Prop. of all children (6-23 mos.) meeting Minimum Meal Frequency	0.65	0.48	0	1	1253	0.66	0.48	633
Child Minimum Acceptable Diet								
Prop. of breastfeeding children (6-23 mos.) meeting Minimum Acceptable Diet	0.25	0.44	0	1	1219	0.2	0.4	520
Prop. of non-breastfeeding children (6-23 mos.) meeting Minimum Acceptable Diet	0.029	0.17	0	1	34	0.27	0.45	113
Prop. of all children (6-23 mos.) meeting Minimum Acceptable Diet	0.25	0.43	0	1	1253	0.21	0.41	633
Prop. of all children (6-11 mos.) meeting Minimum Acceptable Diet	0.22	0.42	0	1	488	0.05	0.22	198
Prop. of all children (12-17 mos.) meeting Minimum Acceptable Diet	0.26	0.44	0	1	763	0.26	0.44	191
Prop. of all children (18-23 mos.) meeting Minimum Acceptable Diet	0	0	0	0	2	0.3	0.46	244
Child Iron rich food consumption								
Prop. of children (6-23 mos.) receiving iron rich foods	0.46	0.50	0	1	1331	0.32	0.47	634

SECTION 8: SELF-REPORTED CHILD HEALTH SEEKING BEHAVIOUR	**Midline**					**Baseline**		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Childhood Illness								
Prop. of children experiencing any type of illness in the last two weeks	0.40	0.49	0	1	1340	0.24	0.43	3220
Prop. of children experiencing diarrhea in the last two weeks	0.069	0.25	0	1	535	0.083	0.28	779
Prop. of children experiencing pneumonia in the last two weeks	0.17	0.37	0	1	535	0.12	0.32	779
Prop. of children experiencing fever in the last two weeks	0.71	0.45	0	1	535	0.73	0.44	779
Prop. of children experiencing other illnesses in the last two weeks	0.022	0.15	0	1	535	0.071	0.26	779
Primary advice or treatment for Childhood Illness								
Prop. of children experiencing illness who sought treatment	0.87	0.34	0	1	535	0.76	0.43	779
Time (days) before seeking treatment after noticing illness	1.33	0.88	0	10	466	0.95	1.00	589

Prop. of children seeking treatment that were still experiencing symptoms on day of interview	0.16	0.36	0	1	466	0.2	0.4	589
Prop. of ill children going to town hospital for initial treatment	0.036	0.19	0	1	466	0.027	0.16	589
Prop. of ill children going to station hospital for initial treatment	0.084	0.28	0	1	466	0.037	0.19	589
Prop. of ill children going to Health Assistant for initial treatment	0.073	0.26	0	1	466	0.097	0.3	589
Prop. of ill children going to Midwife for initial treatment	0.23	0.42	0	1	466	0.23	0.42	589
Prop. of ill children going to doctor (private clinic) for initial treatment	0.32	0.47	0	1	466	0.15	0.36	589
Prop. of ill children going to community health worker for initial treatment	0.0043	0.065	0	1	466	0.037	0.19	589
Prop. of ill children going to traditional healer for initial treatment	0.021	0.15	0	1	466	0.015	0.12	589
Prop. of ill children going to Quack for initial treatment	0.030	0.17	0	1	466	0.022	0.15	589
Prop. of ill children buying drugs at a shop for initial treatment	0.18	0.39	0	1	466	0.37	0.48	589
Prop. of ill children going to another place or person for initial treatment	0.017	0.13	0	1	466	0.022	0.15	589
Primary advice or treatment from Skilled Health Personnel								
Prop. of ill children going to skilled health personnel for initial treatment (excl. CHW)	0.74	0.44	0	1	466	0.54	0.5	589
Prop. of ill children going to skilled health personnel for initial treatment (incl. CHW)	0.74	0.44	0	1	466	0.58	0.49	589
Prop. of children w/diarrhea going to skilled health personnel for initial treatment (excl. CHW)	0.57	0.50	0	1	37	0.63	0.49	57
Prop. of children w/diarrhea going to skilled health personnel for initial treatment (incl. CHW)	0.59	0.50	0	1	37	0.67	0.48	57
Prop. of children w/pneumonia going to skilled health personnel for initial treatment (excl. CHW)	0.77	0.43	0	1	90	0.56	0.5	80
Prop. of children w/pneumonia going to skilled health personnel for initial treatment (incl. CHW)	0.77	0.43	0	1	90	0.65	0.48	80
Secondary advice or treatment for Childhood Illness								
Prop. of children seeking treatment that didn't seek any additional treatment	0.81	0.39	0	1	464	0.9	0.3	588
Prop. of children seeking treatment going to town hospital for secondary treatment	0.024	0.15	0	1	464	0.02	0.14	588
Prop. of children seeking treatment going to station hospital for secondary treatment	0.028	0.17	0	1	464	0.0034	0.058	588
Prop. of children seeking treatment going to Health Assistant for secondary treatment	0.017	0.13	0	1	464	0.01	0.1	588
Prop. of children seeking treatment going to Midwife for secondary treatment	0.028	0.17	0	1	464	0.017	0.13	588
Prop. of children seeking treatment going to doctor (private clinic) for secondary treatment	0.054	0.23	0	1	464	0.024	0.15	588
Prop. of children seeking treatment going to community health worker for secondary treatment	0.0022	0.046	0	1	464	0	0	588
Prop. of children seeking treatment going to traditional healer for secondary treatment	0.0086	0.093	0	1	464	0	0	588

Prop. of children seeking treatment going to Quack for secondary treatment	0.0065	0.080	0	1	464	0.0051	0.071	588
Prop. of children seeking treatment buying drugs at a shop for secondary treatment	0.019	0.14	0	1	464	0.015	0.12	588
Prop. of children seeking treatment going to another place or person for secondary treatment	0.0022	0.046	0	1	464	0.0017	0.041	588
Secondary advice or treatment from Skilled Health Personnel								
Prop. of children seeking treatment going to skilled health personnel for secondary treatment (excl. CHW)	0.15	0.36	0	1	464	0.075	0.26	588
Prop. of children seeking treatment going to skilled health personnel for secondary treatment (incl. CHW)	0.15	0.36	0	1	464	0.075	0.26	588
Childhood illness treatment cost								
Prop. of children seeking treatment that paid for initial treatment	0.92	0.28	0	1	464	0.82	0.39	588
Prop. of children seeking secondary treatment that paid for this treatment	0.93	0.25	0	1	88	0.93	0.26	57
Total cost of treatment (initial and secondary)	7549.1	14038.0	100	100000	428	5119.4	13392.7	486
Prop. of children paying for treatment who borrowed money to cover costs (initial and secondary)	0.12	0.32	0	1	428	0.13	0.34	53

SECTION 9: KNOWLEDGE OF INFANT & YOUNG CHILD FEEDING PRACTICES	**Midline**					**Baseline**		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Key IYCF Practices								
Prop. of mothers who know the best time to initiate breastfeeding	0.94	0.24	0	1	1337	0.79	0.41	5413
Prop. of mothers who responded "Don't Know"	0.044	0.21	0	1	1337	0.13	0.34	5413
Prop. of mothers who have heard about Exclusive Breastfeeding	0.98	0.15	0	1	1337	0.94	0.25	5413
Prop. of mothers who responded "Don't Know"	0.017	0.13	0	1	1337	0	0	5413
Prop. of mothers who know the meaning of Exclusive Breastfeeding	0.89	0.31	0	1	1337	0.77	0.42	5413
Prop. of mothers who responded "Don't Know"	0.10	0.30	0	1	1337	0.14	0.34	5413
Prop. of mothers who know the optimal length of Breastfeeding	0.78	0.41	0	1	1337	0.29	0.45	5413
Prop. of mothers who responded "Don't Know"	0.029	0.17	0	1	1337	0.085	0.28	5413
Prop. of mothers who know the best time to introduce complementary feeding	0.69	0.46	0	1	1337	0.66	0.47	5413
Prop. of mothers who responded "Don't Know"	0.021	0.14	0	1	1337	0.064	0.24	5413
Healthy Complementary Feeding Practices								
Prop. of mothers who think it's important for children to have enough food (Quantity)	0.50	0.50	0	1	1337	0.4	0.49	5413
Prop. of mothers who responded "Don't Know"	0.40	0.49	0	1	1337	0.46	0.5	5413
Prop. of mothers who think it's important for children to have different types of food (Quality)	0.73	0.45	0	1	1337	0.6	0.49	5413
Prop. of mothers who responded "Don't Know"	0.21	0.41	0	1	1337	0.3	0.46	5413
Prop. of mothers who think frequency of feeding is important	0.44	0.50	0	1	1337	0.3	0.46	5413

Prop. of mothers who responded "Don't Know"	0.48	0.50	0	1	1337	0.5	0.5	5413
Important food groups for child growth & development								
Prop. of mothers who think Grains are important for child growth & development	0.70	0.46	0	1	1337	0.75	0.43	5413
Prop. of mothers who think Vit. rich fruits are important for child growth & development	0.30	0.46	0	1	1337	0.25	0.43	5413
Prop. of mothers who think other types of fruits are important for child growth & development	0.12	0.32	0	1	1337	0.13	0.33	5413
Prop. of mothers who think dark yellow / orange vegetables are important for child growth & development	0.56	0.50	0	1	1337	0.45	0.5	5413
Prop. of mothers who think dark & leafy green vegetables are important for child growth & development	0.51	0.50	0	1	1337	0.48	0.5	5413
Prop. of mothers who think other types of vegetable are important for child growth & development	0.0067	0.082	0	1	1337	0.018	0.13	5413
Prop. of mothers who think fish is important for child growth & development	0.58	0.49	0	1	1337	0.51	0.5	5413
Prop. of mothers who think meat is important for child growth & development	0.63	0.48	0	1	1337	0.54	0.5	5413
Prop. of mothers who think poultry is important for child growth & development	0.37	0.48	0	1	1337	0.34	0.48	5413
Prop. of mothers who think eggs are important for child growth & development	0.34	0.47	0	1	1337	0.35	0.48	5413
Prop. of mothers who think dairy products are important for child growth & development	0.21	0.41	0	1	1337	0.22	0.41	5413
Prop. of mothers who think pulses are important for child growth & development	0.54	0.50	0	1	1337	0.35	0.48	5413
Prop. of mothers who think oil/fats are important for child growth & development	0.044	0.21	0	1	1337	0.09	0.29	5413
Prop. of mothers who think Rice porridge is important for child growth & development	0.043	0.20	0	1	1337	0.054	0.23	5413
Prop. of mothers who think other kinds of foods are important for child growth & development	0.059	0.24	0	1	1337	0.16	0.36	5413

SECTION 10: SELF-REPORTED WATER, SANITATION, AND HYGIENE PRACTICES			**Midline**				**Baseline**	
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Treatment of Drinking Water								
Prop. of HH applying treatment to drinking water	0.98	0.14	0	1	1337	0.90	0.31	5413
Prop. of such HH using boiling as water treatment	0.021	0.14	0	1	1311	0.14	0.35	4845
Prop. of such HH adding bleach/chlorine as water treatment	0.031	0.17	0	1	1311	0.0099	0.099	4845
Prop. of such HH adding iodine as water treatment	0.00076	0.028	0	1	1311	0.0012	0.035	4845
Prop. of such HH using filtration through cloth as water treatment	0.89	0.31	0	1	1311	0.75	0.43	4845
Prop. of such HH using water filter (ceramic, sand, etc.) as water treatment	0.070	0.26	0	1	1311	0.20	0.40	4845
Prop. of such HH using composite filters as water treatment	0.019	0.14	0	1	1311	0.013	0.11	4845
Prop. of such HH using sedimentation as water treatment	0.083	0.28	0	1	1311	0.075	0.26	4845

Prop. of such HH that did not apply any particular water treatment method	0.016	0.13	0	1	1311	0.0045	0.067	4845
Prop. of such HH using some other water treatment method	0.024	0.15	0	1	1311	0.032	0.18	4845
Latrine Usage								
Prop. of HH using water flush toilet with septic tank	0.11	0.32	0	1	1337	0.041	0.2	5392
Prop. of HH using water flush toilet without tank	0.035	0.18	0	1	1337	0.017	0.13	5392
Prop. of HH using pit latrine (fly proof)	0.085	0.28	0	1	1337	0.34	0.47	5392
Prop. of HH using pit latrine (not fly proof)	0.61	0.49	0	1	1337	0.4	0.49	5392
Prop. of HH practicing open defecation	0.15	0.36	0	1	1337	0.19	0.39	5392
Prop. of HH using some other type of latrine	0.0022	0.047	0	1	1337	0.017	0.13	5392
Prop. of HH using improved sanitation/latrine practices	0.19	0.39	0	1	1337	0.32	0.46	5392
Water Storage								
Prop. of HH owning a pot for water storage	0.96	0.19	0	1	1337	0.98	0.14	5413
Capacity of storage pot (liters)	60.0	121.2	10	960	1285	41.3	59.4	5301
Prop. of such HH with clean pot	0.85	0.36	0	1	1285	0.79	0.41	5301
Prop. of such HH having water pot cover	0.59	0.49	0	1	1285	0.56	0.50	5301
Prop. of such HH having clean cup for water pot	0.72	0.45	0	1	1285	0.71	0.45	5301
Prop. of such HH meeting none of the above conditions	0.033	0.18	0	1	1285	0.085	0.28	5301
Handwashing Practices								
Prop. of HH using soap for handwashing	0.98	0.14	0	1	1337	0.94	0.23	5413
Prop. of mothers that ALWAYS wash hands with soap after using the toilet	0.64	0.48	0	1	1336	0.57	0.5	5413
Prop. of mothers that ALWAYS wash hands with soap before eating	0.23	0.42	0	1	1337	0.23	0.42	5413
Prop. of mothers that ALWAYS wash hands with soap after eating	0.23	0.42	0	1	1314	0.32	0.47	5413
Prop. of mothers that ALWAYS wash hands with soap before & after handling children	0.027	0.16	0	1	1337	0.015	0.12	5413
Prop. of mothers that ALWAYS wash hands with soap before cooking / food preparation	0.16	0.37	0	1	1337	0.15	0.36	5413
Prop. of mothers that ALWAYS wash hands with soap before feeding children	0.13	0.34	0	1	1337	0.025	0.16	5413
Prop. of mothers that ALWAYS wash hands with soap after changing infant	0.021	0.14	0	1	1337	0.012	0.11	5413
Prop. of mothers that ALWAYS wash hands with soap after disposing of infant feces	0.26	0.44	0	1	1337	0.069	0.25	5413
Prop. of mothers that ALWAYS wash hands with soap after cleaning (house or elsewhere)	0.18	0.39	0	1	1337			
Prop. of mothers that ALWAYS wash hands with soap after returning from work/fields	0.064	0.25	0	1	1337			
Prop. of mothers that ALWAYS wash hands with soap before going to sleep	0.052	0.22	0	1	1337			
Prop. of mothers that ALWAYS wash hands with soap in other circumstances	0.036	0.19	0	1	1337	0.21	0.41	5413
Handwashing at critical times								
Prop. of mothers that ALWAYS wash hands with soap at five critical times	0.00075	0.027	0	1	1336			
Prop. of mothers that OFTEN wash hands with soap at five critical times	0.00075	0.027	0	1	1336			
SECTION 11: SELF-REPORTED CASH USAGE	**Midline**					**Baseline**		

	Average	sd	min	max	Nb obs	mean	sd	Nb obs
Enrollment in LEGACY Program								
Prop. of mothers enrolled in Legacy program	0.55	0.50	0	1	1337			
Prop. of enrolled mothers that withdraw their monthly cash transfer by themselves	1	0	1	1	735			
Prop. of enrolled mothers that have already exited from the LEGACY program	0.012	0.11	0	1	735			
Decisions about cash usage								
Prop. of enrolled mothers that mostly make their own decisions on cash usage	1.00	0.064	0	1	735			
Prop. of enrolled mothers reporting that their husband mostly makes decisions on cash usage	0.0027	0.052	0	1	735			
Cash usage by Category (MMK)								
Total amount of previous cash transfer	10136.1	1159.3	10000	20000	735			
Amount spent on food expenditure	6921.6	3799.8	0	20000	735			
Amount spent on gifts	15.5	164.2	0	2000	735			
Amount spent on livestock expenditures	5.17	140.2	0	3800	735			
Amount spent on business investment	35.1	476.6	0	7000	735			
Amount spent on water expenses	10.9	246.0	0	6500	735			
Amount spent on medical expenses	1149.5	2315.3	0	10000	735			
Amount spent on school expenses	38.4	456.5	0	7000	735			
Amount spent on debt payment	53.2	471.3	0	5600	735			
Amount spent on transport	2.04	41.2	0	1000	735			
Amount spent on agricultural inputs	0	0	0	0	735			
Amount spent on household items	411.3	1570.9	0	10000	735			
Amount spent on fuel expenses	0	0	0	0	735			
Amount spent on clothing/shoes	509.9	1635.3	0	15000	735			
Amount saved	866.6	2339.6	0	10000	735			
Amount spent on other expenditures	157.7	1027.6	0	10000	735			
Prop. of mothers spending any amount of cash transfer on food	0.88	0.32	0	1	735			

SECTION 12: HOUSEHOLD CHARACTERISTICS	**Midline**					**Baseline**		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Land								
Prop. of HH owning land	0.61	0.49	0	1	1337	0.73	0.45	5413
Size of land holding (acres)	2.20	3.16	0.0100	15	821	2.88	4.88	3936
Mobile phone								
Prop. of HH owning a mobile phone	0.87	0.34	0	1	1333	0.84	0.37	5411
Prop. of such HH in which the mother owns a mobile phone	0.62	0.49	0	1	1155	0.62	0.49	5409
Housing Characteristics								
Prop. of HH with Improved roof material	0.81	0.40	0	1	1337			
Prop. of HH with Improved wall material	0.20	0.40	0	1	1337			
Prop. of HH with Improved floor material	0.25	0.44	0	1	1337			
Prop. of HH with separate rooms	1.00	0.047	0	1	1334			
Number of rooms in house	1.06	0.71	0	6	1331			
Electricity								
Prop. of HH with access to Electricity	0.38	0.48	0	1	1337	0.27	0.44	5412
Prop. of HH with constant access to Electricity	0.24	0.43	0	1	1337	0.23	0.42	5412

Annex 2: Summary Statistics (Midline Intervention Villages Only)

SECTION 1: RESPONDENT INFORMATION	Midline					Baseline		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Child Birth Weight								
Child Birth Weight (lb)	3.19	0.55	0.90	4.90	605	3.21	1.04	1243
Prop. of Low Birth Weight children	0.088	0.28	0	1	605	0.11	0.31	1243
Prop. of children who have valid birth weight record	0.19	0.39	0	1	606	0.2	0.4	1243

SECTION 2: SELF-REPORTED ANTENATAL CARE PRACTICES (FIRST PREGNANCY 2016)	Midline					Baseline		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
ANC Visits								
Prop. of mothers receiving ANC	0.99	0.079	0	1	954	0.96	0.19	2846
No. of visits with skilled Health Personnel	5.34	2.60	0	10	954	4.70	3.62	2846
Prop. of mothers with at least 4 visits to Skilled Health Personnel	0.71	0.45	0	1	954	0.57	0.50	2846
Prop. of mothers with at least 1 visit to Skilled Health Personnel	0.99	0.12	0	1	954	0.93	0.25	2846
Iron tablet consumption								
Prop. of mothers taking iron tablets	0.97	0.17	0	1	953	0.90	0.30	2828
No. of iron tablets consumed	152.1	65.8	2	300	908	136.8	142.9	2760
Prop. of mothers taking at least 180 iron tablets	0.49	0.50	0	1	908	0.36	0.48	2760
Additional Support During Pregnancy								
Prop. of mothers working during pregnancy	0.49	0.50	0	1	954	0.49	0.50	2843
Month of pregnancy at which mother stopped work	7.25	1.60	2	9	464	7.28	1.69	1381
Prop. of mothers receiving support with hh chores during pregnancy	0.55	0.50	0	1	954	0.48	0.50	2844
ANC costs								
Prop. of mothers seeking ANC that paid for treatment	0.46	0.50	0	1	948	0.29	0.46	2843
Total amount of ANC cost	40888.3	41231.7	500	150000	440	36726.1	59750.7	836
Prop. of mothers paying for ANC who borrowed money to cover the cost	0.23	0.42	0	1	440	0.14	0.34	836

SECTION 3: SELF-REPORTED DELIVERY CARE PRACTICES (FIRST PREGNANCY 2016)	Midline					Baseline		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Delivery with Skilled Health Personnel								
Prop. of deliveries attended by Skilled Health Personnel	0.84	0.37	0	1	949	0.72	0.45	2837
Prop. of home deliveries attended by Skilled Health Personnel	0.35	0.48	0	1	949	0.4	0.49	2837
Prop. of deliveries at health care facility with trained health professional	0.49	0.50	0	1	949	0.31	0.46	2837
Delivery costs								
Prop. of mothers paying for delivery costs	0.99	0.086	0	1	947	0.97	0.17	2830
Total amount of delivery costs	102050.6	96412.6	3500	300000	940	77758.9	110472	2745
Prop. of mothers paying for delivery who borrowed money to cover costs	0.33	0.47	0	1	940	0.32	0.47	2745

SECTION 4: SELF-REPORTED POST NATAL CARE PRACTICES (FIRST DELIVERY 2016)	Midline					Baseline		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
PNC Visit with Skilled Health Personnel								

Prop. of mothers receiving PNC within 6 weeks of delivery	0.56	0.50	0	1	948	0.61	0.5	2791
No. of PNC visits with a Skilled Health Personnel	0.85	1.15	0	7	948	2.21	2.87	2791
Prop. of mothers receiving at least one PNC check with a Skilled Health Personnel	0.53	0.50	0	1	948	0.5	0.5	2791
PNC visit cost								
Prop. of mothers receiving PNC who paid for care	0.28	0.45	0	1	539			
Total cost of PNC	14924.8	14543.2	500	50000	153			
Prop. of mothers paying for PNC who borrowed money to cover costs	0.16	0.37	0	1	153			

SECTION 5: SELF-REPORTED NEWBORN CARE PRACTICES (FIRST PREGNANCY 2016)	**Midline**					**Baseline**		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
NBC Visit with Skilled Health Personnel								
Prop. of mothers receiving Newborn Care	0.52	0.50	0	1	943	0.59	0.5	2828
Number of NBC visits with Skilled Health Personnel or CHW/AMW	0.78	1.09	0	8	943	2.30	2.88	2826
Prop. of mothers having at least one NBC visit with Skilled Health Personnel or CHW/AMW	0.52	0.50	0	1	943	0.53	0.5	2826
NBC visit cost								
Prop. of mothers who paid for Newborn Care	0.22	0.41	0	1	493			
Total cost of Newborn Care	40157.4	47563.0	1000	140000	108			
Prop. of mothers paying for NBC who borrowed money to cover costs	0.36	0.48	0	1	108			
PNC and NBC visit cost								
Prop. of mothers receiving both PNC and NBC who paid for care	0.36	0.48	0	1	837	0.14	0.35	1675
Total cost of PNC and NBC	28975.4	37660.2	500	190000	305	35827.7	64023.1	242
Prop. of mothers paying for PNC and NBC who borrowed money to cover costs	0.28	0.45	0	1	305	0.3	0.46	242

SECTION 6: MOTHER DIETARY DIVERSITY	**Midline**					**Baseline**		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Mothers' Food Consumption by food group (24 hr recall)								
Prop. of mothers reporting Grain cons.	1	0	1	1	955			
Prop. of mothers reporting Vit. A rich Vegetable cons.	0.73	0.45	0	1	955			
Prop. of mothers reporting Vitamin A rich Fruit cons.	0.35	0.48	0	1	955			
Prop. of mothers reporting Other Fruit cons.	0.16	0.37	0	1	955			
Prop. of mothers reporting Other Vegetable cons.	0.68	0.47	0	1	955			
Prop. of mothers reporting Meat cons.	0.75	0.43	0	1	955			
Prop. of mothers reporting Egg cons.	0.30	0.46	0	1	955			
Prop. of mothers reporting Pulse cons.	0.66	0.48	0	1	955			
Prop. of mothers reporting Nut cons.	0.23	0.42	0	1	955			
Prop. of mothers reporting Dairy cons.	0.046	0.21	0	1	955			
Women Dietary Diversity Score (9 food groups)								
Dietary Diversity Score for Women	4.64	1.25	1	9	955	4.27	1.34	1133
Prop. of mothers meeting Minimum DDS for Women (above or equal to sample mean)	0.48	0.5	0	1	955	0.46	0.5	4362
Women Dietary Diversity Score (10 food groups)								

Dietary Diversity Score for Women	4.89	1.46	1	10	955			
Prop. of mothers meeting Minimum DDS for Women	0.57	0.50	0	1	955			

SECTION 7: SELF-REPORTED INFANT & YOUNG CHILD FEEDING PRACTICES	**Midline**					**Baseline**		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Breastfeeding								
Prop. of children receiving early initiation of breastfeeding (0-23 months)	0.83	0.37	0	1	948	0.74	0.44	1254
Prop. of children receiving exclusive breastfeeding (0-5 months)	0.40	0.55	0	1	5	0.63	0.48	623
Prop. of children receiving predominant breastfeeding (0-5 months)	0.40	0.55	0	1	5	0.76	0.43	623
Prop. of children aged 12 to 15 months still breastfeeding	0.96	0.21	0	1	556	0.89	0.32	115
Prop. of children aged 20 to 23 months still breastfeeding	.	.	.	.	0	0.69	0.47	156
Complementary Feeding								
Prop. of children aged 6 to 9 months receiving timely complementary feeding	0.94	0.24	0	1	17	0.88	0.32	129
Prop. of children aged 6 to 8 months receiving semi-solid food	1	0	1	1	5	0.94	0.24	85
Child (6-23 months) Food Consumption by food group (mother's 24 hr recall)								
Prop. of children reporting Grain cons.	0.97	0.17	0	1	949	0.95	0.23	634
Prop. of children reporting Pulse & Nut cons.	0.50	0.50	0	1	949	0.35	0.48	634
Prop. of children reporting Dairy cons.	0.095	0.29	0	1	949	0.088	0.28	634
Prop. of children reporting Meat & Fish cons.	0.53	0.50	0	1	949	0.32	0.47	634
Prop. of children reporting Egg cons.	0.35	0.48	0	1	949	0.32	0.47	634
Prop. of children reporting Vit. rich Vegetable & Fruit cons.	0.42	0.49	0	1	949	0.46	0.50	634
Prop. of children reporting Other Vegetable & Fruit cons.	0.20	0.40	0	1	949	0.18	0.39	634
Child Dietary Diversity Score								
Child Dietary Diversity Score (6-23 mos.)	3.06	1.39	0	7	949	2.67	1.45	634
Prop. of children (6-23 mos.) meeting Minimum DDS	0.37	0.48	0	1	949	0.28	0.45	634
Child Minimum Meal Frequency								
Prop. of breastfeeding children (6-8 mos.) meeting Minimum Meal Frequency	1	0	1	1	5	0.75	0.44	88
Prop. of breastfeeding children (9-23 mos.) meeting Minimum Meal Frequency	0.72	0.45	0	1	863	0.65	0.48	432
Prop. of breastfeeding children (6-23 mos.) meeting Minimum Meal Frequency	0.72	0.45	0	1	868	0.67	0.47	520
Prop. of non-breastfeeding children (6-23 mos.) meeting Minimum Meal Frequency	0.58	0.50	0	1	24	0.61	0.49	113
Prop. of all children (6-23 mos.) meeting Minimum Meal Frequency	0.71	0.45	0	1	892	0.66	0.48	633
Child Minimum Acceptable Diet								
Prop. of breastfeeding children (6-23 mos.) meeting Minimum Acceptable Diet	0.32	0.47	0	1	868	0.2	0.4	520
Prop. of non-breastfeeding children (6-23 mos.) meeting Minimum Acceptable Diet	0.042	0.20	0	1	24	0.27	0.45	113
Prop. of all children (6-23 mos.) meeting Minimum Acceptable Diet	0.31	0.46	0	1	892	0.21	0.41	633

Prop. of all children (6-11 mos.) meeting Minimum Acceptable Diet	0.28	0.45	0	1	343	0.05	0.22	198
Prop. of all children (12-17 mos.) meeting Minimum Acceptable Diet	0.33	0.47	0	1	548	0.26	0.44	191
Prop. of all children (18-23 mos.) meeting Minimum Acceptable Diet	0	.	0	0	1	0.3	0.46	244
Child Iron rich food consumption								
Prop. of children (6-23 mos.) receiving iron rich foods	0.53	0.50	0	1	949	0.32	0.47	634

SECTION 8: SELF-REPORTED CHILD HEALTH SEEKING BEHAVIOR	**Midline**					**Baseline**		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Childhood Illness								
Prop. of children experiencing any type of illness in the last two weeks	0.39	0.49	0	1	954	0.24	0.43	3220
Prop. of children experiencing diarrhea in the last two weeks	0.070	0.26	0	1	370	0.083	0.28	779
Prop. of children experiencing pneumonia in the last two weeks	0.16	0.37	0	1	370	0.12	0.32	779
Prop. of children experiencing fever in the last two weeks	0.71	0.45	0	1	370	0.73	0.44	779
Prop. of children experiencing other illnesses in the last two weeks	0.019	0.14	0	1	370	0.071	0.26	779
Primary advice or treatment for Childhood Illness								
Prop. of children experiencing illness who sought treatment	0.89	0.32	0	1	370	0.76	0.43	779
Time (days) before seeking treatment after noticing illness	1.34	0.92	0	10	328	0.95	1	589
Prop. of children seeking treatment that were still experiencing symptoms on day of interview	0.16	0.36	0	1	328	0.2	0.4	589
Prop. of ill children going to town hospital for initial treatment	0.034	0.18	0	1	328	0.027	0.16	589
Prop. of ill children going to station hospital for initial treatment	0.091	0.29	0	1	328	0.037	0.19	589
Prop. of ill children going to Health Assistant for initial treatment	0.055	0.23	0	1	328	0.097	0.3	589
Prop. of ill children going to Midwife for initial treatment	0.24	0.43	0	1	328	0.23	0.42	589
Prop. of ill children going to doctor (private clinic) for initial treatment	0.34	0.47	0	1	328	0.15	0.36	589
Prop. of ill children going to community health worker for initial treatment	0	0	0	0	328	0.037	0.19	589
Prop. of ill children going to traditional healer for initial treatment	0.018	0.13	0	1	328	0.015	0.12	589
Prop. of ill children going to Quack for initial treatment	0.030	0.17	0	1	328	0.022	0.15	589
Prop. of ill children buying drugs at a shop for initial treatment	0.18	0.38	0	1	328	0.37	0.48	589
Prop. of ill children going to another place or person for initial treatment	0.012	0.11	0	1	328	0.022	0.15	589
Primary advice or treatment from Skilled Health Personnel								
Prop. of ill children going to skilled health personnel for initial treatment (excl. CHW)	0.76	0.43	0	1	328	0.54	0.5	589
Prop. of ill children going to skilled health personnel for initial treatment (incl. CHW)	0.76	0.43	0	1	328	0.58	0.49	589
Prop. of children w/diarrhea going to skilled health personnel for initial treatment (excl.	0.50	0.51	0	1	26	0.63	0.49	57

CHW)								
Prop. of children w/diarrhea going to skilled health personnel for initial treatment (incl. CHW)	0.50	0.51	0	1	26	0.67	0.48	57
Prop. of children w/pneumonia going to skilled health personnel for initial treatment (excl. CHW)	0.79	0.41	0	1	61	0.56	0.5	80
Prop. of children w/pneumonia going to skilled health personnel for initial treatment (incl. CHW)	0.79	0.41	0	1	61	0.65	0.48	80
Secondary advice or treatment for Childhood Illness								
Prop. of children seeking treatment that didn't seek any additional treatment	0.77	0.42	0	1	328	0.9	0.3	588
Prop. of children seeking treatment going to town hospital for secondary treatment	0.024	0.15	0	1	328	0.02	0.14	588
Prop. of children seeking treatment going to station hospital for secondary treatment	0.037	0.19	0	1	328	0.0034	0.058	588
Prop. of children seeking treatment going to Health Assistant for secondary treatment	0.018	0.13	0	1	328	0.01	0.1	588
Prop. of children seeking treatment going to Midwife for secondary treatment	0.034	0.18	0	1	328	0.017	0.13	588
Prop. of children seeking treatment going to doctor (private clinic) for secondary treatment	0.064	0.25	0	1	328	0.024	0.15	588
Prop. of children seeking treatment going to community health worker for secondary treatment	0.0030	0.055	0	1	328	0	0	588
Prop. of children seeking treatment going to traditional healer for secondary treatment	0.012	0.11	0	1	328	0	0	588
Prop. of children seeking treatment going to Quack for secondary treatment	0.0061	0.078	0	1	328	0.0051	0.071	588
Prop. of children seeking treatment buying drugs at a shop for secondary treatment	0.024	0.15	0	1	328	0.015	0.12	588
5`Prop. of children seeking treatment going to another place or person for secondary treatment	0.0030	0.055	0	1	328	0.0017	0.041	588
Secondary advice or treatment from Skilled Health Personnel								
Prop. of children seeking treatment going to skilled health personnel for secondary treatment (excl. CHW)	0.18	0.38	0	1	328	0.075	0.26	588
Prop. of children seeking treatment going to skilled health personnel for secondary treatment (incl. CHW)	0.18	0.38	0	1	328	0.075	0.26	588
Childhood illness treatment cost								
Prop. of children seeking treatment that paid for initial treatment	0.92	0.27	0	1	328	0.82	0.39	588
Prop. of children seeking secondary treatment that paid for this treatment	0.93	0.25	0	1	74	0.93	0.26	57
Total cost of treatment (initial and secondary)	7528.9	13108.3	100	100000	305	5119.4	13392.7	486
Prop. of children paying for treatment who borrowed money to cover costs (initial and secondary)	0.092	0.29	0	1	305	0.13	0.34	53

SECTION 9: KNOWLEDGE OF INFANT & YOUNG CHILD FEEDING PRACTICES	**Midline**					**Baseline**		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Key IYCF Practices								
Prop. of mothers who know the best time to initiate breastfeeding	0.96	0.20	0	1	955	0.79	0.41	5413
Prop. of mothers who responded "Don't	0.027	0.16	0	1	955	0.13	0.34	5413

Know"								
Prop. of mothers who have heard about Exclusive Breastfeeding	0.99	0.11	0	1	955	0.94	0.25	5413
Prop. of mothers who responded "Don't Know"	0.0084	0.091	0	1	955	0	0	5413
Prop. of mothers who know the meaning of Exclusive Breastfeeding	0.92	0.28	0	1	955	0.77	0.42	5413
Prop. of mothers who responded "Don't Know"	0.081	0.27	0	1	955	0.14	0.34	5413
Prop. of mothers who know the optimal length of Breastfeeding	0.80	0.40	0	1	955	0.29	0.45	5413
Prop. of mothers who responded "Don't Know"	0.024	0.15	0	1	955	0.085	0.28	5413
Prop. of mothers who know the best time to introduce complementary feeding	0.71	0.45	0	1	955	0.66	0.47	5413
Prop. of mothers who responded "Don't Know"	0.016	0.12	0	1	955	0.064	0.24	5413
Healthy Complementary Feeding Practices								
Prop. of mothers who think it's important for children to have enough food (Quantity)	0.50	0.50	0	1	955	0.4	0.49	5413
Prop. of mothers who responded "Don't Know"	0.39	0.49	0	1	955	0.46	0.5	5413
Prop. of mothers who think it's important for children to have different types of food (Quality)	0.76	0.43	0	1	955	0.6	0.49	5413
Prop. of mothers who responded "Don't Know"	0.17	0.38	0	1	955	0.3	0.46	5413
Prop. of mothers who think frequency of feeding is important	0.48	0.50	0	1	955	0.3	0.46	5413
Prop. of mothers who responded "Don't Know"	0.44	0.50	0	1	955	0.5	0.5	5413
Important food groups for child growth & development								
Prop. of mothers who think Grains are important for child growth & development	0.70	0.46	0	1	955	0.75	0.43	5413
Prop. of mothers who think Vit. rich fruits are important for child growth & development	0.33	0.47	0	1	955	0.25	0.43	5413
Prop. of mothers who think other types of fruits are important for child growth & development	0.14	0.34	0	1	955	0.13	0.33	5413
Prop. of mothers who think dark yellow / orange vegetables are important for child growth & development	0.60	0.49	0	1	955	0.45	0.5	5413
Prop. of mothers who think dark & leafy green vegetables are important for child growth & development	0.56	0.50	0	1	955	0.48	0.5	5413
Prop. of mothers who think other types of vegetable are important for child growth & development	0.0073	0.085	0	1	955	0.018	0.13	5413
Prop. of mothers who think fish is important for child growth & development	0.62	0.49	0	1	955	0.51	0.5	5413
Prop. of mothers who think meat is important for child growth & development	0.67	0.47	0	1	955	0.54	0.5	5413
Prop. of mothers who think poultry is important for child growth & development	0.39	0.49	0	1	955	0.34	0.48	5413
Prop. of mothers who think eggs are important for child growth & development	0.36	0.48	0	1	955	0.35	0.48	5413
Prop. of mothers who think dairy products are important for child growth & development	0.22	0.42	0	1	955	0.22	0.41	5413
Prop. of mothers who think pulses are important for child growth & development	0.59	0.49	0	1	955	0.35	0.48	5413

Prop. of mothers who think oil/fats are important for child growth & development	0.043	0.20	0	1	955	0.09	0.29	5413
Prop. of mothers who think Rice porridge is important for child growth & development	0.040	0.20	0	1	955	0.054	0.23	5413
Prop. of mothers who think other kinds of foods are important for child growth & development	0.059	0.24	0	1	955	0.16	0.36	5413

SECTION 10: SELF-REPORTED WATER, SANITATION, AND HYGIENE PRACTICES	**Midline**					**Baseline**		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Treatment of Drinking Water								
Prop. of HH applying treatment to drinking water	0.98	0.15	0	1	955	0.90	0.31	5413
Prop. of such HH using boiling as water treatment	0.019	0.14	0	1	934	0.14	0.35	4845
Prop. of such HH adding bleach/chlorine as water treatment	0.033	0.18	0	1	934	0.0099	0.099	4845
Prop. of such HH adding iodine as water treatment	0.0011	0.033	0	1	934	0.0012	0.035	4845
Prop. of such HH using filtration through cloth as water treatment	0.89	0.31	0	1	934	0.75	0.43	4845
Prop. of such HH using water filter (ceramic, sand, etc.) as water treatment	0.066	0.25	0	1	934	0.20	0.40	4845
Prop. of such HH using composite filters as water treatment	0.025	0.16	0	1	934	0.013	0.11	4845
Prop. of such HH using sedimentation as water treatment	0.065	0.25	0	1	934	0.075	0.26	4845
Prop. of such HH that did not apply any particular water treatment method	0.013	0.11	0	1	934	0.0045	0.067	4845
Prop. of such HH using some other water treatment method	0.022	0.15	0	1	934	0.032	0.18	4845
Latrine Usage								
Prop. of HH using water flush toilet with septic tank	0.12	0.32	0	1	955	0.041	0.2	5392
Prop. of HH using water flush toilet without tank	0.037	0.19	0	1	955	0.017	0.13	5392
Prop. of HH using pit latrine (fly proof)	0.085	0.28	0	1	955	0.34	0.47	5392
Prop. of HH using pit latrine (not fly proof)	0.61	0.49	0	1	955	0.4	0.49	5392
Prop. of HH practicing open defecation	0.14	0.35	0	1	955	0.19	0.39	5392
Prop. of HH using some other type of latrine	0.0031	0.056	0	1	955	0.017	0.13	5392
Prop. of HH using improved sanitation/latrine practices	0.19	0.39	0	1	955	0.32	0.46	5392
Water Storage								
Prop. of HH owning a pot for water storage	0.95	0.21	0	1	955	0.98	0.14	5413
Capacity of storage pot (liters)	50.6	89.1	10	960	912	41.3	59.4	5301
Prop. of such HH with clean pot	0.83	0.37	0	1	912	0.79	0.41	5301
Prop. of such HH having water pot cover	0.61	0.49	0	1	912	0.56	0.50	5301
Prop. of such HH having clean cup for water pot	0.72	0.45	0	1	912	0.71	0.45	5301
Prop. of such HH meeting none of the above conditions	0.034	0.18	0	1	912	0.085	0.28	5301
Handwashing Practices								
Prop. of HH using soap for handwashing	0.98	0.13	0	1	955	0.94	0.23	5413
Prop. of mothers that ALWAYS wash hands with soap after using the toilet	0.65	0.48	0	1	954	0.57	0.5	5413
Prop. of mothers that ALWAYS wash hands with soap before eating	0.25	0.43	0	1	955	0.23	0.42	5413
Prop. of mothers that ALWAYS wash hands with soap after eating	0.25	0.43	0	1	937	0.32	0.47	5413
Prop. of mothers that ALWAYS wash hands with soap before & after handling children	0.035	0.18	0	1	955	0.015	0.12	5413

Prop. of mothers that ALWAYS wash hands with soap before cooking / food preparation	0.16	0.37	0	1	955	0.15	0.36	5413
Prop. of mothers that ALWAYS wash hands with soap before feeding children	0.15	0.36	0	1	955	0.025	0.16	5413
Prop. of mothers that ALWAYS wash hands with soap after changing infant	0.020	0.14	0	1	955	0.012	0.11	5413
Prop. of mothers that ALWAYS wash hands with soap after disposing of infant feces	0.26	0.44	0	1	955	0.069	0.25	5413
Prop. of mothers that ALWAYS wash hands with soap after cleaning (house or elsewhere)	0.19	0.40	0	1	955			
Prop. of mothers that ALWAYS wash hands with soap after returning from work/fields	0.062	0.24	0	1	955			
Prop. of mothers that ALWAYS wash hands with soap before going to sleep	0.044	0.21	0	1	955			
Prop. of mothers that ALWAYS wash hands with soap in other circumstances	0.037	0.19	0	1	955	0.21	0.41	5413
Handwashing at critical times								
Prop. of mothers that ALWAYS wash hands with soap at five critical times	0.0010	0.032	0	1	954			
Prop. of mothers that OFTEN wash hands with soap at five critical times	0.0010	0.032	0	1	954			

Annex 3: Summary Statistics (Midline Control Villages Only)

SECTION 1: RESPONDENT INFORMATION	**Midline**					**Baseline**		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Child Birth Weight								

Child Birth Weight (lb)	3.18	0.55	1.4	4.5	245	3.21	1.04	1243
Prop. of Low Birth Weight children	0.12	0.32	0	1	245	0.11	0.31	1243
Prop. of children who have valid birth weight record	0.2	0.4	0	1	246	0.2	0.4	1243

SECTION 2: SELF-REPORTED ANTENATAL CARE PRACTICES (FIRST PREGNANCY 2016)	**Midline**					**Baseline**		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
ANC Visits								
Prop. of mothers receiving ANC	1	0	1	1	381	0.96	0.19	2846
No. of visits with skilled Health Personnel	5.45	2.73	1	10	381	4.70	3.62	2846
Prop. of mothers with at least 4 visits to Skilled Health Personnel	0.67	0.47	0	1	381	0.57	0.50	2846
Prop. of mothers with at least 1 visit to Skilled Health Personnel	1	0	1	1	381	0.93	0.25	2846
Iron tablet consumption								
Prop. of mothers taking iron tablets	0.96	0.2	0	1	381	0.90	0.30	2828
No. of iron tablets consumed	147.7	68.6	4	300	363	136.8	142.9	2760
Prop. of mothers taking at least 180 iron tablets	0.44	0.5	0	1	363	0.36	0.48	2760
Additional Support During Pregnancy								
Prop. of mothers working during pregnancy	0.45	0.5	0	1	381	0.49	0.50	2843
Month of pregnancy at which mother stopped work	7.07	1.93	1	9	170	7.28	1.69	1381
Prop. of mothers receiving support with hh chores during pregnancy	0.49	0.5	0	1	381	0.48	0.50	2844
ANC costs								
Prop. of mothers seeking ANC that paid for treatment	0.47	0.5	0	1	381	0.29	0.46	2843
Total amount of ANC cost	45397.2	42406	1000	150000	178	36726.1	59750.7	836
Prop. of mothers paying for ANC who borrowed money to cover the cost	0.35	0.48	0	1	178	0.14	0.34	836

SECTION 3: SELF-REPORTED DELIVERY CARE PRACTICES (FIRST PREGNANCY 2016)	**Midline**					**Baseline**		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Delivery with Skilled Health Personnel								
Prop. of deliveries attended by Skilled Health Personnel	0.85	0.36	0	1	380	0.72	0.45	2837
Prop. of home deliveries attended by Skilled Health Personnel	0.31	0.46	0	1	380	0.4	0.49	2837
Prop. of deliveries at health care facility with trained health professional	0.54	0.5	0	1	380	0.31	0.46	2837
Delivery costs								
Prop. of mothers paying for delivery costs	1	0.051	0	1	379	0.97	0.17	2830
Total amount of delivery costs	117978	105734	5000	300000	378	77758.9	110472	2745
Prop. of mothers paying for delivery who borrowed money to cover costs	0.54	0.5	0	1	378	0.32	0.47	2745

SECTION 4: SELF-REPORTED POST NATAL CARE PRACTICES (FIRST DELIVERY 2016)	**Midline**					**Baseline**		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
PNC Visit with Skilled Health Personnel								
Prop. of mothers receiving PNC within 6 weeks of delivery	0.47	0.5	0	1	380	0.61	0.5	2791
No. of PNC visits with a Skilled Health Personnel	0.76	1.14	0	7	380	2.21	2.87	2791
Prop. of mothers receiving at least one PNC check with a Skilled Health Personnel	0.46	0.5	0	1	380	0.5	0.5	2791
PNC visit cost								
Prop. of mothers receiving PNC who paid for care	0.31	0.46	0	1	182			
Total cost of PNC	15553.6	15654	1000	50000	56			
Prop. of mothers paying for PNC who borrowed money to cover costs	0.29	0.46	0	1	56			

SECTION 5: SELF-REPORTED NEWBORN CARE PRACTICES (FIRST PREGNANCY 2016)	Midline					Baseline		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
NBC Visit with Skilled Health Personnel								
Prop. of mothers receiving Newborn Care	0.43	0.5	0	1	380	0.59	0.5	2828
Number of NBC visits with Skilled Health Personnel or CHW/AMW	0.63	0.96	0	7	380	2.30	2.88	2826
Prop. of mothers having at least one NBC visit with Skilled Health Personnel or CHW/AMW	0.43	0.5	0	1	380	0.53	0.5	2826
NBC visit cost								
Prop. of mothers who paid for Newborn Care	0.26	0.44	0	1	165			
Total cost of Newborn Care	31302.3	40178	500	140000	43			
Prop. of mothers paying for NBC who borrowed money to cover costs	0.33	0.47	0	1	43			
PNC and NBC visit cost								
Prop. of mothers receiving both PNC and NBC who paid for care	0.41	0.49	0	1	218	0.14	0.35	1675
Total cost of PNC and NBC	24633.3	32573	500	140000	90	35827.7	64023.1	242
Prop. of mothers paying for PNC and NBC who borrowed money to cover costs	0.31	0.47	0	1	90	0.3	0.46	242

SECTION 6: MOTHER DIETARY DIVERSITY	Midline					Baseline		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Mothers' Food Consumption by food group (24 hr recall)								
Prop. of mothers reporting Grain cons.	1	0	1	1	382			
Prop. of mothers reporting Vit. A rich Vegetable cons.	0.7	0.46	0	1	382			
Prop. of mothers reporting Vitamin A rich Fruit cons.	0.23	0.42	0	1	382			
Prop. of mothers reporting Other Fruit cons.	0.15	0.35	0	1	382			
Prop. of mothers reporting Other Vegetable cons.	0.63	0.48	0	1	382			
Prop. of mothers reporting Meat cons.	0.59	0.49	0	1	382			
Prop. of mothers reporting Egg cons.	0.23	0.42	0	1	382			
Prop. of mothers reporting Pulse cons.	0.57	0.5	0	1	382			
Prop. of mothers reporting Nut cons.	0.19	0.39	0	1	382			
Prop. of mothers reporting Dairy cons.	0.026	0.16	0	1	382			
Women Dietary Diversity Score (9 food groups)								
Dietary Diversity Score for Women	4.09	1.19	1	7	382	4.27	1.34	1133
Prop. of mothers meeting Minimum DDS for Women (above or equal to sample mean)	0.64	0.48	0	1	382	0.46	0.5	4362
Women Dietary Diversity Score (10 food groups)								
Dietary Diversity Score for Women	4.31	1.37	1	8	382			
Prop. of mothers meeting Minimum DDS for Women	0.41	0.49	0	1	382			

SECTION 7: SELF-REPORTED INFANT & YOUNG CHILD FEEDING PRACTICES	Midline					Baseline		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Breastfeeding								
Prop. of children receiving early initiation of breastfeeding (0-23 months)	0.74	0.44	0	1	384	0.74	0.44	1254
Prop. of children receiving exclusive breastfeeding (0-5 months)	0.25	0.5	0	1	4	0.63	0.48	623
Prop. of children receiving predominant breastfeeding (0-5 months)	0.5	0.58	0	1	4	0.76	0.43	623
Prop. of children aged 12 to 15 months still breastfeeding	0.95	0.22	0	1	221	0.89	0.32	115
Prop. of children aged 20 to 23 months still breastfeeding	1	.	1	1	1	0.69	0.47	156
Complementary Feeding								
Prop. of children aged 6 to 9 months receiving timely complementary feeding	0.88	0.35	0	1	8	0.88	0.32	129

Prop. of children aged 6 to 8 months receiving semi-solid food	0.5	0.71	0	1	2	0.94	0.24	85
Child (6-23 months) Food Consumption by food group (mother's 24 hr recall)								
Prop. of children reporting Grain cons.	0.95	0.22	0	1	382	0.95	0.23	634
Prop. of children reporting Pulse & Nut cons.	0.39	0.49	0	1	382	0.35	0.48	634
Prop. of children reporting Dairy cons.	0.06	0.24	0	1	382	0.088	0.28	634
Prop. of children reporting Meat & Fish cons.	0.3	0.46	0	1	382	0.32	0.47	634
Prop. of children reporting Egg cons.	0.21	0.41	0	1	382	0.32	0.47	634
Prop. of children reporting Vit. rich Vegetable & Fruit cons.	0.22	0.42	0	1	382	0.46	0.50	634
Prop. of children reporting Other Vegetable & Fruit cons.	0.12	0.33	0	1	382	0.18	0.39	634
Child Dietary Diversity Score								
Child Dietary Diversity Score (6-23 mos.)	2.26	1.16	0	7	382	2.67	1.45	634
Prop. of children (6-23 mos.) meeting Minimum DDS	0.14	0.35	0	1	382	0.28	0.45	634
Child Minimum Meal Frequency								
Prop. of breastfeeding children (6-8 mos.) meeting Minimum Meal Frequency	1	.	1	1	1	0.75	0.44	88
Prop. of breastfeeding children (9-23 mos.) meeting Minimum Meal Frequency	0.5	0.5	0	1	350	0.65	0.48	432
Prop. of breastfeeding children (6-23 mos.) meeting Minimum Meal Frequency	0.5	0.5	0	1	351	0.67	0.47	520
Prop. of non-breastfeeding children (6-23 mos.) meeting Minimum Meal Frequency	0.5	0.53	0	1	10	0.61	0.49	113
Prop. of all children (6-23 mos.) meeting Minimum Meal Frequency	0.5	0.5	0	1	361	0.66	0.48	633
Child Minimum Acceptable Diet								
Prop. of breastfeeding children (6-23 mos.) meeting Minimum Acceptable Diet	0.1	0.3	0	1	351	0.2	0.4	520
Prop. of non-breastfeeding children (6-23 mos.) meeting Minimum Acceptable Diet	0	0	0	0	10	0.27	0.45	113
Prop. of all children (6-23 mos.) meeting Minimum Acceptable Diet	0.097	0.3	0	1	361	0.21	0.41	633
Prop. of all children (6-11 mos.) meeting Minimum Acceptable Diet	0.083	0.28	0	1	145	0.05	0.22	198
Prop. of all children (12-17 mos.) meeting Minimum Acceptable Diet	0.11	0.31	0	1	215	0.26	0.44	191
Prop. of all children (18-23 mos.) meeting Minimum Acceptable Diet	0	.	0	0	1	0.3	0.46	244
Child Iron rich food consumption								
Prop. of children (6-23 mos.) receiving iron rich foods	0.3	0.46	0	1	382	0.32	0.47	634

SECTION 8: SELF-REPORTED CHILD HEALTH SEEKING BEHAVIOR	**Midline**					**Baseline**		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Childhood Illness								
Prop. of children experiencing any type of illness in the last two weeks	0.43	0.5	0	1	386	0.24	0.43	3220
Prop. of children experiencing diarrhea in the last two weeks	0.067	0.25	0	1	165	0.083	0.28	779
Prop. of children experiencing pneumonia in the last two weeks	0.18	0.38	0	1	165	0.12	0.32	779
Prop. of children experiencing fever in the last two weeks	0.71	0.46	0	1	165	0.73	0.44	779
Prop. of children experiencing other illnesses in the last two weeks	0.03	0.17	0	1	165	0.071	0.26	779
Primary advice or treatment for Childhood Illness								
Prop. of children experiencing illness who sought treatment	0.84	0.37	0	1	165	0.76	0.43	779

Time (days) before seeking treatment after noticing illness	1.32	0.78	0	5	138	0.95	1	589
Prop. of children seeking treatment that were still experiencing symptoms on day of interview	0.16	0.37	0	1	138	0.2	0.4	589
Prop. of ill children going to town hospital for initial treatment	0.043	0.2	0	1	138	0.027	0.16	589
Prop. of ill children going to station hospital for initial treatment	0.065	0.25	0	1	138	0.037	0.19	589
Prop. of ill children going to Health Assistant for initial treatment	0.12	0.32	0	1	138	0.097	0.3	589
Prop. of ill children going to Midwife for initial treatment	0.2	0.4	0	1	138	0.23	0.42	589
Prop. of ill children going to doctor (private clinic) for initial treatment	0.27	0.44	0	1	138	0.15	0.36	589
Prop. of ill children going to community health worker for initial treatment	0.014	0.12	0	1	138	0.037	0.19	589
Prop. of ill children going to traditional healer for initial treatment	0.029	0.17	0	1	138	0.015	0.12	589
Prop. of ill children going to Quack for initial treatment	0.029	0.17	0	1	138	0.022	0.15	589
Prop. of ill children buying drugs at a shop for initial treatment	0.2	0.4	0	1	138	0.37	0.48	589
Prop. of ill children going to another place or person for initial treatment	0.029	0.17	0	1	138	0.022	0.15	589
Primary advice or treatment from Skilled Health Personnel								
Prop. of ill children going to skilled health personnel for initial treatment (excl. CHW)	0.69	0.46	0	1	138	0.54	0.5	589
Prop. of ill children going to skilled health personnel for initial treatment (incl. CHW)	0.7	0.46	0	1	138	0.58	0.49	589
Prop. of children w/diarrhea going to skilled health personnel for initial treatment (excl. CHW)	0.73	0.47	0	1	11	0.63	0.49	57
Prop. of children w/diarrhea going to skilled health personnel for initial treatment (incl. CHW)	0.82	0.4	0	1	11	0.67	0.48	57
Prop. of children w/pneumonia going to skilled health personnel for initial treatment (excl. CHW)	0.72	0.45	0	1	29	0.56	0.5	80
Prop. of children w/pneumonia going to skilled health personnel for initial treatment (incl. CHW)	0.72	0.45	0	1	29	0.65	0.48	80
Secondary advice or treatment for Childhood Illness								
Prop. of children seeking treatment that didn't seek any additional treatment	0.9	0.31	0	1	136	0.9	0.3	588
Prop. of children seeking treatment going to town hospital for secondary treatment	0.022	0.15	0	1	136	0.02	0.14	588
Prop. of children seeking treatment going to station hospital for secondary treatment	0.0074	0.086	0	1	136	0.0034	0.058	588
Prop. of children seeking treatment going to Health Assistant for secondary treatment	0.015	0.12	0	1	136	0.01	0.1	588
Prop. of children seeking treatment going to Midwife for secondary treatment	0.015	0.12	0	1	136	0.017	0.13	588
Prop. of children seeking treatment going to doctor (private clinic) for secondary treatment	0.029	0.17	0	1	136	0.024	0.15	588
Prop. of children seeking treatment going to community health worker for secondary treatment	0	0	0	0	136	0	0	588
Prop. of children seeking treatment going to traditional healer for secondary treatment	0	0	0	0	136	0	0	588
Prop. of children seeking treatment going to Quack for secondary treatment	0.0074	0.086	0	1	136	0.0051	0.071	588
Prop. of children seeking treatment buying drugs at a shop for secondary treatment	0.0074	0.086	0	1	136	0.015	0.12	588

Prop. of children seeking treatment going to another place or person for secondary treatment	0	0	0	0	136	0.0017	0.041	588
Secondary advice or treatment from Skilled Health Personnel								
Prop. of children seeking treatment going to skilled health personnel for secondary treatment (excl. CHW)	0.088	0.28	0	1	136	0.075	0.26	588
Prop. of children seeking treatment going to skilled health personnel for secondary treatment (incl. CHW)	0.088	0.28	0	1	136	0.075	0.26	588
Childhood illness treatment cost								
Prop. of children seeking treatment that paid for initial treatment	0.9	0.3	0	1	136	0.82	0.39	588
Prop. of children seeking secondary treatment that paid for this treatment	0.93	0.27	0	1	14	0.93	0.26	57
Total cost of treatment (initial and secondary)	7599.2	16173	100	100000	123	5119.4	13392.7	486
Prop. of children paying for treatment who borrowed money to cover costs (initial and secondary)	0.18	0.38	0	1	123	0.13	0.34	53

SECTION 9: KNOWLEDGE OF INFANT & YOUNG CHILD FEEDING PRACTICES	**Midline**					**Baseline**		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Key IYCF Practices								
Prop. of mothers who know the best time to initiate breastfeeding	0.89	0.32	0	1	382	0.79	0.41	5413
Prop. of mothers who responded "Don't Know"	0.086	0.28	0	1	382	0.13	0.34	5413
Prop. of mothers who have heard about Exclusive Breastfeeding	0.95	0.22	0	1	382	0.94	0.25	5413
Prop. of mothers who responded "Don't Know"	0.039	0.19	0	1	382	0	0	5413
Prop. of mothers who know the meaning of Exclusive Breastfeeding	0.83	0.38	0	1	382	0.77	0.42	5413
Prop. of mothers who responded "Don't Know"	0.15	0.36	0	1	382	0.14	0.34	5413
Prop. of mothers who know the optimal length of Breastfeeding	0.75	0.44	0	1	382	0.29	0.45	5413
Prop. of mothers who responded "Don't Know"	0.042	0.2	0	1	382	0.085	0.28	5413
Prop. of mothers who know the best time to introduce complementary feeding	0.62	0.49	0	1	382	0.66	0.47	5413
Prop. of mothers who responded "Don't Know"	0.034	0.18	0	1	382	0.064	0.24	5413
Healthy Complementary Feeding Practices								
Prop. of mothers who think it's important for children to have enough food (Quantity)	0.49	0.5	0	1	382	0.4	0.49	5413
Prop. of mothers who responded "Don't Know"	0.44	0.5	0	1	382	0.46	0.5	5413
Prop. of mothers who think it's important for children to have different types of food (Quality)	0.63	0.48	0	1	382	0.6	0.49	5413
Prop. of mothers who responded "Don't Know"	0.29	0.46	0	1	382	0.3	0.46	5413
Prop. of mothers who think frequency of feeding is important	0.35	0.48	0	1	382	0.3	0.46	5413
Prop. of mothers who responded "Don't Know"	0.58	0.49	0	1	382	0.5	0.5	5413
Important food groups for child growth & development								
Prop. of mothers who think Grains are important for child growth & development	0.7	0.46	0	1	382	0.75	0.43	5413
Prop. of mothers who think Vit. rich fruits are important for child growth & development	0.23	0.42	0	1	382	0.25	0.43	5413
Prop. of mothers who think other types of fruits are important for child growth & development	0.065	0.25	0	1	382	0.13	0.33	5413
Prop. of mothers who think dark yellow / orange vegetables are important for child growth & development	0.45	0.5	0	1	382	0.45	0.5	5413

Prop. of mothers who think dark & leafy green vegetables are important for child growth & development	0.37	0.48	0	1	382	0.48	0.5	5413
Prop. of mothers who think other types of vegetable are important for child growth & development	0.0052	0.072	0	1	382	0.018	0.13	5413
Prop. of mothers who think fish is important for child growth & development	0.46	0.5	0	1	382	0.51	0.5	5413
Prop. of mothers who think meat is important for child growth & development	0.54	0.5	0	1	382	0.54	0.5	5413
Prop. of mothers who think poultry is important for child growth & development	0.3	0.46	0	1	382	0.34	0.48	5413
Prop. of mothers who think eggs are important for child growth & development	0.27	0.44	0	1	382	0.35	0.48	5413
Prop. of mothers who think dairy products are important for child growth & development	0.17	0.38	0	1	382	0.22	0.41	5413
Prop. of mothers who think pulses are important for child growth & development	0.44	0.5	0	1	382	0.35	0.48	5413
Prop. of mothers who think oil/fats are important for child growth & development	0.047	0.21	0	1	382	0.09	0.29	5413
Prop. of mothers who think Rice porridge is important for child growth & development	0.052	0.22	0	1	382	0.054	0.23	5413
Prop. of mothers who think other kinds of foods are important for child growth & development	0.06	0.24	0	1	382	0.16	0.36	5413

SECTION 10: SELF-REPORTED WATER, SANITATION, AND HYGIENE PRACTICES	**Midline**					**Baseline**		
	mean	sd	min	max	Nb obs	mean	sd	Nb obs
Treatment of Drinking Water								
Prop. of HH applying treatment to drinking water	0.99	0.11	0	1	382	0.90	0.31	5413
Prop. of such HH using boiling as water treatment	0.024	0.15	0	1	377	0.14	0.35	4845
Prop. of such HH adding bleach/chlorine as water treatment	0.024	0.15	0	1	377	0.0099	0.099	4845
Prop. of such HH adding iodine as water treatment	0	0	0	0	377	0.0012	0.035	4845
Prop. of such HH using filtration through cloth as water treatment	0.89	0.32	0	1	377	0.75	0.43	4845
Prop. of such HH using water filter (ceramic, sand, etc.) as water treatment	0.08	0.27	0	1	377	0.20	0.40	4845
Prop. of such HH using composite filters as water treatment	0.0053	0.073	0	1	377	0.013	0.11	4845
Prop. of such HH using sedimentation as water treatment	0.13	0.33	0	1	377	0.075	0.26	4845
Prop. of such HH that did not apply any particular water treatment method	0.024	0.15	0	1	377	0.0045	0.067	4845
Prop. of such HH using some other water treatment method	0.027	0.16	0	1	377	0.032	0.18	4845
Latrine Usage								
Prop. of HH using water flush toilet with septic tank	0.1	0.3	0	1	382	0.041	0.2	5392
Prop. of HH using water flush toilet without tank	0.031	0.17	0	1	382	0.017	0.13	5392
Prop. of HH using pit latrine (fly proof)	0.086	0.28	0	1	382	0.34	0.47	5392
Prop. of HH using pit latrine (not fly proof)	0.62	0.49	0	1	382	0.4	0.49	5392
Prop. of HH practicing open defecation	0.16	0.37	0	1	382	0.19	0.39	5392
Prop. of HH using some other type of latrine	0	0	0	0	382	0.017	0.13	5392
Prop. of HH using improved sanitation/latrine practices	0.2	0.4	0	1	382	0.32	0.46	5392
Water Storage								
Prop. of HH owning a pot for water storage	0.98	0.15	0	1	382	0.98	0.14	5413
Capacity of storage pot (liters)	83	174.7	10	960	373	41.3	59.4	5301
Prop. of such HH with clean pot	0.88	0.33	0	1	373	0.79	0.41	5301
Prop. of such HH having water pot cover	0.54	0.5	0	1	373	0.56	0.50	5301
Prop. of such HH having clean cup for water pot	0.74	0.44	0	1	373	0.71	0.45	5301

Prop. of such HH meeting none of the above conditions	0.029	0.17	0	1	373	0.085	0.28	5301
Handwashing Practices								
Prop. of HH using soap for handwashing	0.97	0.17	0	1	382	0.94	0.23	5413
Prop. of mothers that ALWAYS wash hands with soap after using the toilet	0.6	0.49	0	1	382	0.57	0.5	5413
Prop. of mothers that ALWAYS wash hands with soap before eating	0.18	0.38	0	1	382	0.23	0.42	5413
Prop. of mothers that ALWAYS wash hands with soap after eating	0.19	0.39	0	1	377	0.32	0.47	5413
Prop. of mothers that ALWAYS wash hands with soap before & after handling children	0.0079	0.088	0	1	382	0.015	0.12	5413
Prop. of mothers that ALWAYS wash hands with soap before cooking / food preparation	0.15	0.36	0	1	382	0.15	0.36	5413
Prop. of mothers that ALWAYS wash hands with soap before feeding children	0.089	0.29	0	1	382	0.025	0.16	5413
Prop. of mothers that ALWAYS wash hands with soap after changing infant	0.024	0.15	0	1	382	0.012	0.11	5413
Prop. of mothers that ALWAYS wash hands with soap after disposing of infant feces	0.27	0.45	0	1	382	0.069	0.25	5413
Prop. of mothers that ALWAYS wash hands with soap after cleaning (house or elsewhere)	0.15	0.36	0	1	382			
Prop. of mothers that ALWAYS wash hands with soap after returning from work/fields	0.071	0.26	0	1	382			
Prop. of mothers that ALWAYS wash hands with soap before going to sleep	0.073	0.26	0	1	382			
Prop. of mothers that ALWAYS wash hands with soap in other circumstances	0.034	0.18	0	1	382	0.21	0.41	5413
Handwashing at critical times								
Prop. of mothers that ALWAYS wash hands with soap at five critical times	0	0	0	0	382			
Prop. of mothers that OFTEN wash hands with soap at five critical times	0	0	0	0	382			

Annex 4: T-Tests, Child Level Indicators

* p < 0.1, ** p < 0.05, *** p < 0.01	RCT									Government		
Indicator	**Control**	**Treatment (1 + 2)**	**p-value**	**Control**	**Treatment 1**	**p-value**	**Control**	**Treatment 2**	**p-value**	**Control**	**Treatment**	**p-value**
Child Birth Weight												
Child birth weight (lb)	3.189	3.194	0.622	3.189	3.23	0.921	3.189	3.154	0.127	3.092	3.187	0.296
	(0.036)	(0.029)		(0.036)	(0.042)		(0.036)	(0.035)		(0.063)	(0.038)	
Prop. of children with low birth weight	0.124	0.077	**0.045** **	0.124	0.058	**0.069** *	0.124	0.097	0.252	0.083	0.134	0.406
	(0.020)	(0.012)		(0.020)	(0.013)		(0.020)	(0.019)		(0.051)	(0.031)	
Prop. of children with a formal record of birthweight	0.214	0.202	0.851	0.214	0.179	0.7	0.214	0.228	0.905	0.083	0.134	0.377
	(0.047)	(0.027)		(0.047)	(0.038)		(0.047)	(0.039)		(0.045)	(0.047)	
Child birth weight (lb) [among children w/valid record]	3.229	3.066	0.138	3.229	3.1	0.405	3.229	3.037	0.163	3.433	3.253	0.029
	(0.093)	(0.043)		(0.093)	(0.067)		(0.093)	(0.057)		(0.033)	(0.060)	
Prop. of children with low birth weight [among children w/valid record]	0.089	0.08	**0.065** *	0.089	0.022	0.104	0.089	0.13	0.21	0	0	
	(0.037)	(0.033)		(0.037)	(0.020)		(0.037)	(0.056)		(0.000)	(0.000)	
Breastfeeding												
Prop. of children receiving early initiation of breastfeeding (0-23 months)	0.736	0.853	**0.003** ***	0.736	0.868	**0.000** ***	0.736	0.835	**0.03** **	0.790	0.743	0.506
	(0.035)	(0.015)		(0.035)	(0.013)		(0.035)	(0.027)		(0.046)	(0.055)	
Prop. of children receiving exclusive breastfeeding (0-5 months)	0.000	0.667	0.422	0.000	1.000					0.500	0.000	0.391
	(0.000)	(0.333)		(0.000)	(0.000)					(0.500)	(0.000)	
Prop. of children receiving predominant breastfeeding (0-5 months)	0.000	0.667	0.422	0.000	1.000					1.000	0.000	
	(0.000)	(0.333)		(0.000)	(0.000)					(0.000)	(0.000)	
Prop. of children aged 12 to 15 months still breastfeeding	0.941	0.964	0.424	0.941	0.984	**0.082** *	0.941	0.940	0.867	1.000	0.909	**0.001** ***
	(0.021)	(0.010)		(0.021)	(0.009)		(0.021)	(0.019)		(0.000)	(0.020)	
Complementary Feeding												
Prop. of children aged 6 to 9 months receiving timely complementary feeding	0.833	0.917	0.163	0.833	1.000	0.204	0.833	0.833	0.437	1.000	1.000	

	(0.139)	(0.082)		(0.139)	(0.000)		(0.139)	(0.173)		(0.000)	(0.000)	
Child Dietary Diversity Score (6-23 mos.)	2.264	3.152	**0.000** ***	2.264	3.459	**0.000** ***	2.264	2.803	**0.000** ***	2.250	2.629	**0.019** **
	(0.100)	(0.107)		(0.100)	(0.116)		(0.100)	(0.135)		(0.065)	(0.104)	
Prop. of children (6-23 mos.) meeting Minimum DDS	0.146	0.399	**0.000** ***	0.146	0.488	**0.000** ***	0.146	0.298	**0.004** ***	0.100	0.228	**0.014** **
	(0.031)	(0.035)		(0.031)	(0.041)		(0.031)	(0.047)		(0.031)	(0.032)	
Prop. of all children (6-23 mos.) meeting Minimum Meal Frequency	0.500	0.718	**0.000** ***	0.500	0.764	**0.000** ***	0.500	0.662	**0.000** ***	0.525	0.697	0.108
	(0.026)	(0.027)		(0.026)	(0.033)		(0.026)	(0.039)		(0.093)	(0.064)	
Prop. of all children (6-23 mos.) meeting Minimum Acceptable Diet	0.099	0.338	**0.000** ***	0.099	0.417	**0.000** ***	0.099	0.243	**0.003** ***	0.085	0.174	**0.028** **
	(0.027)	(0.032)		(0.027)	(0.039)		(0.027)	(0.043)		(0.030)	(0.022)	
Prop. of children (6-23 mos.) receiving iron rich foods	0.307	0.549	**0.000** ***	0.307	0.603	**0.000** ***	0.307	0.486	**0.000** ***	0.267	0.431	**0.051** *
	(0.032)	(0.023)		(0.032)	(0.024)		(0.032)	(0.039)		(0.040)	(0.048)	
Childhood Illness												
Prop. of children experiencing any type of illness in the last two weeks	0.426	0.377	0.158	0.426	0.390	0.403	0.426	0.362	0.164	0.435	0.438	0.976
	(0.036)	(0.019)		(0.036)	(0.029)		(0.036)	(0.023)		(0.084)	(0.031)	
Prop. of children experiencing diarrhea in the last two weeks	0.058	0.061	0.849	0.058	0.061	0.848	0.058	0.060	0.461	0.111	0.108	0.965
	(0.018)	(0.014)		(0.018)	(0.018)		(0.018)	(0.023)		(0.057)	(0.022)	
Prop. of children experiencing pneumonia in the last two weeks	0.196	0.172	0.142	0.196	0.172	0.359	0.196	0.173	**0.021** **	0.074	0.135	0.174
	(0.041)	(0.027)		(0.041)	(0.029)		(0.041)	(0.049)		(0.060)	(0.047)	
Childhood Illness: Health Seeking Behavior												
Prop. of ill children going to skilled health personnel for initial treatment (excl. CHW)	0.724	0.765	0.684	0.724	0.748	0.787	0.724	0.786	0.675	0.500	0.750	**0.044** **
	(0.050)	(0.034)		(0.050)	(0.054)		(0.050)	(0.041)		(0.153)	(0.091)	
Prop. of ill children going to skilled health personnel for initial treatment (incl. CHW)	0.733	0.765	0.804	0.733	0.748	0.685	0.733	0.786	0.737	0.545	0.750	0.122
	(0.047)	(0.034)		(0.047)	(0.054)		(0.047)	(0.041)		(0.166)	(0.091)	
Prop. of children w/diarrhea going to skilled health personnel for initial treatment (excl. CHW)	0.875	0.444	0.183	0.875	0.300	0.127	0.875	0.625	0.652			

	(0.129)	(0.125)		(0.129)	(0.168)		(0.129)	(0.160)				
Prop. of children w/diarrhea going to skilled health personnel for initial treatment (incl. CHW)	1.000	1.000		1.000	1.000		1.000	1.000				
	(0.000)	(0.000)		(0.000)	(0.000)		(0.000)	(0.000)				
Prop. of children w/pneumonia going to skilled health personnel for initial treatment (excl. CHW)	0.741	0.824	**0.075** *	0.741	0.750	0.436	0.741	0.913	**0.023** **	0.500	0.600	0.599
	(0.107)	(0.063)		(0.107)	(0.102)		(0.107)	(0.059)		(0.000)	(0.167)	
Prop. of children w/pneumonia going to skilled health personnel for initial treatment (incl. CHW)	0.741	0.824	**0.075** *	0.741	0.750	0.436	0.741	0.913	**0.023** **	0.500	0.600	0.599
	(0.107)	(0.063)		(0.107)	(0.102)		(0.107)	(0.059)		(0.000)	(0.167)	
Prop. of children seeking treatment that paid for initial treatment	0.922	0.927	0.620	0.922	0.923	0.403	0.922	0.932	0.964	0.800	0.897	0.504
	(0.019)	(0.018)		(0.019)	(0.024)		(0.019)	(0.027)		(0.144)	(0.039)	
Total cost of treatment (initial and secondary)	8345.794	7340.369	0.821	8345.794	7727.985	0.994	8345.794	6868.182	0.300	2606.250	8282.787	**0.051** *
	(1879.370)	(1019.030)		(1879.370)	(1705.506)		(1879.370)	(877.005)		(554.450)	(2307.330)	
Prop. of children paying for treatment who borrowed money to cover costs (initial and secondary)	0.187	0.090	**0.017** **	0.187	0.060	**0.001** ***	0.187	0.127	0.169	0.125	0.098	0.744
	(0.052)	(0.020)		(0.052)	(0.021)		(0.052)	(0.034)		(0.090)	(0.024)	

Annex 5: T-Tests, Mother Level Indicators

* p < 0.1, ** p < 0.05, *** p < 0.01	RCT									Government		
Indicator	**Control**	**Treatment (1 + 2)**	**p-value**	**Control**	**Treatment 1**	**p-value**	**Control**	**Treatment 2**	**p-value**	**Control**	**Treatment**	**p-value**
Antenatal Care Visits												
Prop. of mothers receiving ANC	1.000	0.992	**0.07** *	1.000	0.986	**0.016** **	1.000	1.000		1.000	1.000	
	(0.000)	(0.004)		(0.000)	(0.008)		(0.000)	(0.000)		(0.000)	(0.000)	
No. of visits with skilled Health Personnel	5.313	5.420	0.489	5.313	5.386	0.552	5.313	5.459	0.151	6.177	4.970	**0.03** **
	(0.463)	(0.254)		(0.463)	(0.388)		(0.463)	(0.329)		(0.436)	(0.631)	
Prop. of mothers with at least 4 visits to Skilled Health Personnel	0.646	0.714	**0.039** **	0.646	0.712	**0.044** **	0.646	0.717	**0.013** **	0.806	0.711	0.296
	(0.057)	(0.036)		(0.057)	(0.054)		(0.057)	(0.049)		(0.052)	(0.084)	
Prop. of mothers with at least 1 visit to Skilled Health Personnel	1.000	0.987	**0.047** **	1.000	0.976	**0.008** ***	1.000	1.000		1.000	0.982	0.141
	(0.000)	(0.007)		(0.000)	(0.012)		(0.000)	(0.000)		(0.000)	(0.011)	
Iron tablet consumption												
Prop. of mothers taking iron tablets	0.959	0.972	0.205	0.959	0.974	0.231	0.959	0.970	0.197	0.952	0.958	0.872
	(0.013)	(0.007)		(0.013)	(0.010)		(0.013)	(0.011)		(0.045)	(0.013)	
No. of iron tablets consumed	146.623	151.344	0.143	146.623	152.743	0.126	146.623	149.747	0.394	153.220	156.065	0.798
	(5.671)	(3.644)		(5.671)	(5.218)		(5.671)	(5.081)		(9.544)	(7.033)	
Prop. of mothers taking at least 180 iron tablets	0.447	0.479	0.155	0.447	0.506	**0.027** **	0.447	0.448	0.816	0.390	0.539	0.125
	(0.044)	(0.032)		(0.044)	(0.050)		(0.044)	(0.039)		(0.074)	(0.051)	
Additional Support During												

Pregnancy												
Prop. of mothers working during pregnancy	0.436	0.501	**0.096** *	0.436	0.483	0.129	0.436	0.522	0.153	0.500	0.416	0.496
	(0.040)	(0.027)		(0.040)	(0.037)		(0.040)	(0.039)		(0.098)	(0.066)	
Month of pregnancy at which mother stopped work	7.014	7.238	0.261	7.014	7.108	0.251	7.014	7.375	0.155	7.323	7.290	0.962
	(0.211)	(0.116)		(0.211)	(0.189)		(0.211)	(0.113)		(0.601)	(0.271)	
ANC Cost												
Prop. of mothers seeking ANC that paid for treatment	0.473	0.465	0.783	0.473	0.461	0.604	0.473	0.470	0.651	0.435	0.458	0.791
	(0.062)	(0.041)		(0.062)	(0.061)		(0.062)	(0.054)		(0.104)	(0.083)	
Total amount of ANC cost	46701.988	41436.125	0.157	46701.988	45081.414	**0.017** **	46701.988	37411.563	0.794	38100.000	38264.473	0.983
	(4912.401)	(3528.045)		(4912.401)	(5842.948)		(4912.401)	(3612.892)		(7799.133)	(4484.407)	
Prop. of mothers paying for ANC who borrowed money to cover the cost	0.338	0.214	0.193	0.338	0.209	0.242	0.338	0.220	0.240	0.407	0.316	0.305
	(0.050)	(0.031)		(0.050)	(0.050)		(0.050)	(0.036)		(0.127)	(0.048)	
Delivery Care												
Prop. of deliveries attended by Skilled Health Personnel	0.903	0.857	**0.064** *	0.903	0.794	**0.004** ***	0.903	0.929	0.370	0.581	0.739	0.167
	(0.019)	(0.028)		(0.019)	(0.046)		(0.019)	(0.020)		(0.099)	(0.078)	
Prop. of home deliveries attended by Skilled Health Personnel	0.355	0.352	0.809	0.355	0.305	0.447	0.355	0.406	0.516	0.097	0.327	**0.042** **
	(0.055)	(0.028)		(0.055)	(0.041)		(0.055)	(0.033)		(0.071)	(0.071)	
Prop. of deliveries at health care facility with trained health professional	0.547	0.505	0.264	0.547	0.489	**0.086** *	0.547	0.523	0.758	0.484	0.412	0.460
	(0.051)	(0.026)		(0.051)	(0.039)		(0.051)	(0.034)		(0.117)	(0.074)	
Delivery Cost												
Prop. of mothers paying for delivery costs	0.997	0.991	0.243	0.997	0.990	0.270	0.997	0.992	0.421	1.000	1.000	
	(0.003)	(0.003)		(0.003)	(0.005)		(0.003)	(0.004)		(0.000)	(0.000)	
Total amount of delivery costs	119792.719	100812.625	**0.062** *	119792.719	102635.836	**0.059** *	119792.719	98738.289	**0.085** *	108725.805	107908.539	0.976
	(9629.330)	(4505.388)		(9629.330)	(7065.428)		(9629.330)	(5285.513)		(25449.672)	(13346.210)	
Prop. of mothers paying for delivery who borrowed money to cover costs	0.538	0.312	**0.000** ***	0.538	0.334	**0.000** ***	0.538	0.287	**0.000** ***	0.548	0.433	0.153
	(0.044)	(0.021)		(0.044)	(0.032)		(0.044)	(0.026)		(0.093)	(0.049)	

Post Natal Care Visits												
Prop. of mothers receiving PNC within 6 weeks of delivery	0.475	0.561	0.153	0.475	0.585	**0.067 ***	0.475	0.534	0.414	0.468	0.573	0.384
	(0.047)	(0.039)		(0.047)	(0.062)		(0.047)	(0.041)		(0.122)	(0.059)	
No. of PNC visits with a Skilled Health Personnel	0.786	0.855	0.669	0.786	0.831	0.827	0.786	0.883	0.641	0.645	0.826	0.387
	(0.091)	(0.087)		(0.091)	(0.132)		(0.091)	(0.115)		(0.187)	(0.135)	
Prop. of mothers receiving at least one PNC check with a Skilled Health Personnel	0.469	0.533	0.356	0.469	0.528	0.408	0.469	0.540	0.334	0.435	0.488	0.656
	(0.050)	(0.038)		(0.050)	(0.064)		(0.050)	(0.041)		(0.129)	(0.067)	
PNC Cost												
Prop. of mothers receiving PNC who paid for care	0.301	0.268	0.322	0.301	0.287	0.307	0.301	0.245	0.220	0.345	0.358	0.938
	(0.043)	(0.026)		(0.043)	(0.036)		(0.043)	(0.037)		(0.149)	(0.058)	
Total cost of PNC	14923.913 (1655.568)	14550.420 (1856.874)	0.564	14923.913 (1655.568)	14114.286 (2688.444)	0.447	14923.913 (1655.568)	15173.470 (2433.628)	0.737	18450.000 (5812.314)	16235.294 (1993.531)	0.719
Prop. of mothers paying for PNC who borrowed money to cover costs	0.283	0.101	**0.044 ****	0.283	0.071	**0.062 ***	0.283	0.143	0.234	0.300	0.382	0.617
	(0.099)	(0.027)		(0.099)	(0.027)		(0.099)	(0.051)		(0.120)	(0.125)	
Newborn Care Visits												
Prop. of mothers receiving Newborn Care	0.447	0.534	**0.085 ***	0.447	0.581	**0.014 ****	0.447	0.481	0.628	0.371	0.482	0.349
	(0.051)	(0.041)		(0.051)	(0.061)		(0.051)	(0.051)		(0.134)	(0.066)	
Number of NBC visits with Skilled Health Personnel or CHW/AMW	0.660	0.795	0.127	0.660	0.843	**0.042 ****	0.660	0.740	0.433	0.484	0.720	0.168
	(0.080)	(0.079)		(0.080)	(0.101)		(0.080)	(0.123)		(0.147)	(0.117)	
Prop. of mothers having at least one NBC visit with Skilled Health Personnel or CHW/AMW	0.447	0.531	**0.097 ***	0.447	0.576	**0.019 ****	0.447	0.481	0.628	0.371	0.463	0.443
	(0.051)	(0.041)		(0.051)	(0.061)		(0.051)	(0.051)		(0.134)	(0.066)	
NBC Cost												
Prop. of mothers who paid for Newborn Care	0.275	0.191	0.106	0.275	0.172	**0.068 ***	0.275	0.216	0.206	0.174	0.367	**0.091 ***
	(0.045)	(0.023)		(0.045)	(0.032)		(0.045)	(0.028)		(0.088)	(0.058)	
Total cost of Newborn Care	29474.359	44955.695	0.349	29474.359	48719.512	0.671	29474.359	40894.738	0.696	49125.000	27086.207	0.499

	(6969.370)	(5763.016)		(6969.370)	(8707.063)		(6969.370)	(7806.676)		(32237.643)	(5507.771)	
Prop. of mothers paying for NBC who borrowed money to cover costs	0.308	0.316	0.467	0.308	0.390	0.784	0.308	0.237	0.157	0.500	0.483	0.950
	(0.076)	(0.046)		(0.076)	(0.059)		(0.076)	(0.065)		(0.289)	(0.115)	
Mothers' Dietary Diversity												
Dietary Diversity Score for Women	4.364	4.995	**0.000** ***	4.364	5.179	**0.000** ***	4.364	4.786	**0.003** ***	4.032	4.416	0.281
	(0.103)	(0.113)		(0.103)	(0.167)		(0.103)	(0.134)		(0.290)	(0.162)	
Prop. of mothers meeting Minimum DDS for Women	0.426	0.591	**0.000** ***	0.426	0.624	**0.000** ***	0.426	0.553	**0.005** ***	0.333	0.482	0.272
	(0.038)	(0.030)		(0.038)	(0.039)		(0.038)	(0.045)		(0.105)	(0.053)	
Knowledge of Infant & Young Child Feeding Practices												
Prop. of mothers who know the best time to initiate breastfeeding	0.884	0.971	**0.000** ***	0.884	0.981	**0.000** ***	0.884	0.959	**0.000** ***	0.905	0.904	0.987
	(0.017)	(0.008)		(0.017)	(0.010)		(0.017)	(0.012)		(0.049)	(0.033)	
Prop. of mothers who know the meaning of Exclusive Breastfeeding	0.837	0.933	**0.002** ***	0.837	0.943	**0.000** ***	0.837	0.921	**0.061** *	0.794	0.831	0.735
	(0.028)	(0.014)		(0.028)	(0.015)		(0.028)	(0.025)		(0.097)	(0.066)	
Prop. of mothers who know the optimal length of Breastfeeding	0.727	0.850	**0.001** ***	0.727	0.867	**0.000** ***	0.727	0.832	**0.06** *	0.841	0.542	**0.026** **
	(0.026)	(0.025)		(0.026)	(0.036)		(0.026)	(0.035)		(0.057)	(0.100)	
Prop. of mothers who know the best time to introduce complementary feeding	0.658	0.721	**0.065** *	0.658	0.795	**0.000** ***	0.658	0.637	0.860	0.444	0.681	**0.007** ***
	(0.047)	(0.041)		(0.047)	(0.053)		(0.047)	(0.060)		(0.083)	(0.049)	
Water treatment												
Prop. of HH applying treatment to drinking water	0.994	0.987	0.134	0.994	0.983	0.145	0.994	0.992	0.343	0.952	0.934	0.603
	(0.004)	(0.007)		(0.004)	(0.013)		(0.004)	(0.005)		(0.022)	(0.032)	
Prop. of HH using improved sanitation/latrine practices	0.201	0.175	0.520	0.201	0.150	0.276	0.201	0.203	0.695	0.175	0.247	0.322
	(0.052)	(0.028)		(0.052)	(0.042)		(0.052)	(0.034)		(0.068)	(0.039)	
Handwashing												
Prop. of HH using soap for handwashing	0.969	0.985	**0.069** *	0.969	0.990	**0.01** **	0.969	0.978	0.188	0.968	0.976	0.840

	(0.013)	(0.005)		(0.013)	(0.007)		(0.013)	(0.007)		(0.032)	(0.014)	
Prop. of mothers that ALWAYS wash hands with soap at five critical times	0.000	0.001	0.368	0.000	0.002	0.175	0.000	0.000		0.000	0.000	
	(0.000)	(0.001)		(0.000)	(0.002)		(0.000)	(0.000)		(0.000)	(0.000)	
Prop. of mothers that OFTEN wash hands with soap at five critical times	0.000	0.001	0.368	0.000	0.002	0.175	0.000	0.000		0.000	0.000	
	(0.000)	(0.001)		(0.000)	(0.002)		(0.000)	(0.000)		(0.000)	(0.000)	
Land Ownership												
Prop. of HH owning land	0.564	0.629	0.175	0.564	0.643	0.112	0.564	0.612	0.321	0.603	0.645	0.665
	(0.042)	(0.028)		(0.042)	(0.041)		(0.042)	(0.037)		(0.069)	(0.065)	
Size of land holding (acres)	2.346	2.378	**0.089 ***	2.346	2.314	**0.061 ***	2.346	2.455	0.133	1.668	1.311	0.666
	(0.322)	(0.263)		(0.322)	(0.382)		(0.322)	(0.362)		(0.628)	(0.543)	
Mobile Phone												
Prop. of HH owning a mobile phone	0.870	0.880	0.674	0.870	0.888	0.499	0.870	0.870	0.973	0.746	0.842	0.167
	(0.024)	(0.015)		(0.024)	(0.020)		(0.024)	(0.022)		(0.080)	(0.048)	
Prop. of such HH in which the mother owns a mobile phone	0.633	0.654	0.427	0.633	0.633	0.788	0.633	0.679	**0.065 ***	0.404	0.460	0.505
	(0.036)	(0.025)		(0.036)	(0.031)		(0.036)	(0.042)		(0.060)	(0.067)	
Housing Characteristics												
Number of rooms in house	1.089	1.067	0.660	1.089	1.098	0.928	1.089	1.033	**0.085 ***	0.935	1.006	0.625
	(0.048)	(0.036)		(0.048)	(0.055)		(0.048)	(0.041)		(0.084)	(0.121)	

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