**SUMMARY**

**Nehnwaa Subnational Projection (2009-2013)**

|  |  |  |
| --- | --- | --- |
|  | **Children under 5 yrs** | **Maternal** |
| **Year** | **<1 month** | **1-59 months** |  |
| 2009 | 0 | 0 | 0 |
| 2010 | 1 | 13 | 0 |
| 2011 | 2 | 27 | 0 |
| 2012 | 14 | 55 | 1 |
| 2013 | 25 | 82 | 3 |
|  | 42 | 177 | 4 |
| **Total** | **223** |

* According to the data analysis from LiST, it was found that the intervention of ITN/IRS - Households protected from malaria (31%) had the largest impact in preventing deaths in children under 5 years of age (0-60 months). Oral rehydration solution (ORS) intervention had the second largest impact by taking 21% in preventing children’s lives.
* According to the data analysis from LiST, it was found that the intervention of Clean birth practices (78%) had the largest impact in preventing maternal deaths in 2013.

Difference in intervention impact National VS. Subnational

1. Children

2. Maternal

* It is worth noticing that there are remarkable difference between national and subnational coverages levels for interventions of clean birth practice and labor & delivery. Such outcome might be due to lack of subnational coverage data for certain interventions.

LIMITATION & CONCLUSION

* Lack of availability of data source in subnational level.
* Available data on some of project indicators which were selected by the project researchers are not included in default data in the system. Thus, subnational projection through LiST cannot be conducted
* It is safe to conclude that the intervention of ITN/IRS uses and clean birth practice had considerable impact in saving lives of Nimba County’s children and mothers, respectively and saving total 223 lives (minimum).

SUGGESTIONS

* It might be worth keep the track of national projections for each technical projects implemented in Curamericas Global. Although limitation of data in subnational level is predicted, it can be useful to understand which interventions had the most impact for each project sites (in national level) and later compare to see if the project site showed similar trend in terms of intervention impact.

 INTRODUCTION

The purpose of this documentation is to determine how much impact did the Nehnwaa Child Survival Project, implemented by the Curamericas Global, made in improving the maternal and child health status within the project catchment area in Nimba County, Liberia. The level of impact will be measured by the number of additional deaths prevented (“lives saved”) in maternal and child health at the end of project period in 2013.

METHODS

In order to find out the number of lives saved, the Lives Saved Tool (LiST) was utilized. As one of main module of an analytical software called Spectrum, LiST is an evidence-based tool for estimating intervention impact in maternal and child health outcomes by changing coverage level for a wide range of health interventions over time. Especially, the subnational-wizard in LiST was used to model projection that is specific for Nimba County. The main functions of the wizard are to set up a projection with subnational coverage estimates that user enters, and to use the change from national estimates (defaults in the software from large household surveys such as the DHS or MICS) to the subnational coverage estimates (user entered) to project subnational baseline inputs necessary for LiST modeling, if users don't already have them available. Please note that for certain missing data on intervention coverage at subnational level, the national coverage available by default in LiST was used.

RESULTS

**1. Liberia National Projection (2009-2013)**

**Additional deaths prevented (“Lives Saved”) relative to impact year**

|  |  |  |
| --- | --- | --- |
|  | **Children under 5 yrs** | **Maternal** |
| **Year** | **<1 month** | **1-59 months** |  |
| 2009 | 0 | 0 | 0 |
| 2010 | 125 | 4 | 12 |
| 2011 | 248 | 379 | 24 |
| 2012 | 558 | 283 | 149 |
| 2013 | 682 | 423 | 166 |
|  | 1,613 | 1,089 | 351 |
| **Total** | **3,053** |

1) Child (0-60 months)

**Additional deaths prevented in children under five years of age by intervention relative to impact year (Total (0-60 months))**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **2009** | **2010** | **2011** | **2012** | **2013** | **%** |
| Pregnancy |  |  |  |  |  |  |
| IPTp - Intermittent preventive treatment of malaria during pregnancy | 0 | 2 | 4 | 3 | 1 | 0 |
| Syphilis detection and treatment | 0 | 0 | 1 | 7 | 8 | 1 |
| PMTCT - Prevention of mother to child transmission of HIV (including breastfeeding choices) | 0 | 1 | -16 | -28 | 15 | 1 |
| Maternal age and birth order | 0 | 0 | 0 | 0 | 1 | 0 |
| Birth intervals | 0 | 0 | 0 | 0 | 0 |  |
| Childbirth |  |  |  |  |  |  |
| Clean birth practices | 0 | 8 | 15 | 23 | 31 | 2 |
| Immediate assessment and stimulation | 0 | 6 | 12 | 18 | 24 | 2 |
| Labor and delivery management | 0 | 20 | 40 | 233 | 261 | 20 |
| Neonatal resuscitation | 0 | 16 | 33 | 49 | 65 | 5 |
| Antibiotics for pPRoM | 0 | 2 | 4 | 22 | 25 | 2 |
| Breastfeeding |  |  |  |  |  |  |
| Changes in breastfeeding | 0 | 20 | 40 | 60 | 81 | 6 |
| Preventive |  |  |  |  |  |  |
| Clean postnatal practices | 0 | 18 | 36 | 53 | 70 | 5 |
| Vitamin A supplementation | 0 | 8 | 7 | -135 | -7 |  |
| Improved water source | 0 | 2 | 5 | 8 | 10 | 1 |
| Water connection in the home | 0 | -1 | -1 | -2 | -3 |  |
| Improved sanitation - Utilization of latrines or toilets | 0 | 2 | 3 | 5 | 6 | 0 |
| Hygienic disposal of children's stools | 0 | -3 | -6 | -9 | -13 |  |
| ITN/IRS - Households protected from malaria | 0 | 54 | 111 | 149 | 188 | 14 |
| Vaccines |  |  |  |  |  |  |
| DPT vaccine | 0 | -20 | -8 | 6 | -1 |  |
| H. influenzae b vaccine | 0 | -125 | 112 | 264 | 248 | 19 |
| Measles vaccine | 0 | -7 | -9 | 2 | -1 |  |
| Curative after birth |  |  |  |  |  |  |
| Thermal care | 0 | 8 | 15 | 22 | 30 | 2 |
| Injectable antibiotics for neonatal sepsis/pneumonia | 0 | 33 | 65 | 95 | 123 | 9 |
| ORS - oral rehydration solution | 0 | 32 | 66 | 108 | 134 | 10 |
| Antibiotics for treatment of dysentery | 0 | 0 | 0 | 0 | 0 |  |
| Oral antibiotics for pneumonia | 0 | -48 | -95 | -141 | -190 |  |
| Vitamin A for treatment of measles | 0 | 5 | 4 | -71 | -4 |  |
| ACTs - Artemesinin compounds for treatment of malaria | 0 | 93 | 184 | 90 | -3 |  |
| Cotrimoxazole | 0 | 2 | 7 | 11 | 7 | 1 |
| ART | 0 | 0 | -2 | -1 | 1 | 0 |

* According to the data analysis from LiST, it was found that the interventions of labor and delivery management (20%) and H.influenzae b vaccine (19%) are the ones with the largest impact in saving lives of children under that age of five (0-60 months).
* Labor and delivery management intervention refers to efforts to increase the number of women receiving labor and delivery management from a skilled birth attendant.

2) Maternal

**Additional maternal deaths prevented by intervention relative to impact year**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Intervention** | **2009** | **2010** | **2011** | **2012** | **2013** | **%** |
| Pregnancy |  |  |  |  |  |  |
| IPTp | 0 | 0 | 0 | 0 | 0 |  |
| Hypertensive disorder case management | 0 | 0 | 0 | 0 | 0 |  |
| Malaria case management | 0 | 0 | 0 | 0 | 0 |  |
| MgSO4 management of pre-eclampsia | 0 | 0 | 0 | 0 | 0 | 16 |
| Childbirth |  |  |  |  |  |  |
| Clean birth practices | 0 | 3 | 6 | 8 | 11 | 7 |
| Labor and delivery management | 0 | 3 | 7 | 84 | 91 | 55 |
| Antibiotics for pPRoM | 0 | 1 | 1 | 7 | 8 | 5 |
| MgSO4 management of eclampsia | 0 | 2 | 4 | 23 | 26 |  |
| AMTSL | 0 | 2 | 5 | 26 | 29 | 17 |

* According to the data analysis from LiST, it was found that the interventions of labor and delivery management (55%) had the largest impact in preventing maternal deaths in 2013.
* It was found that intervention of labor and delivery management had the largest impact preventing neonatal, child, and maternal lives in 2013, which is the end year of the Nehnwaa project. Following table shows the types of labor and delivery care services provided in Liberia’s Basic Pack of Health Services (BPHS).



*Resource: http://apps.who.int/medicinedocs/documents/s19808en/s19808en.pdf*

**2. Nehnwaa Subnational Projection (2009-2013)**

|  |  |  |
| --- | --- | --- |
|  | **Children under 5 yrs** | **Maternal** |
| **Year** | **<1 month** | **1-59 months** |  |
| 2009 | 0 | 0 | 0 |
| 2010 | 1 | 13 | 0 |
| 2011 | 2 | 27 | 0 |
| 2012 | 14 | 55 | 1 |
| 2013 | 25 | 82 | 3 |
|  | 42 | 177 | 4 |
| **Total** | **223** |

1) Child (0-60 months)

**Additional deaths prevented in children under five years of age by intervention relative to impact year (Total (0-60 months))**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **2009** | **2010** | **2011** | **2012** | **2013** | **%** |
| **Pregnancy** |  |  |  |  |  |  |
| IPTp - Intermittent preventive treatment of malaria during pregnancy | 0 | 0 | 0 | 2 | 4 | 4 |
| Syphilis detection and treatment | 0 | 0 | 0 | 0 | 0 | 0 |
| PMTCT - Prevention of mother to child transmission of HIV (including breastfeeding choices) | 0 | 0 | -1 | -1 | 1 | 1 |
| **Childbirth** |  |  |  |  |  |  |
| Clean birth practices | 0 | 0 | 0 | 3 | 5 | 5 |
| Immediate assessment and stimulation | 0 | 0 | 0 | 3 | 5 | 5 |
| Labor and delivery management | 0 | 0 | 1 | 5 | 10 | 9 |
| **Preventive** |  |  |  |  |  |  |
| Appropriate complementary feeding | 0 | 0 | 0 | 0 | 1 | 1 |
| Vitamin A supplementation | 0 | 1 | 2 | 2 | 3 | 3 |
| Hand washing with soap | 0 | 2 | 4 | 9 | 14 | 13 |
| ITN/IRS - Households protected from malaria | 0 | 10 | 20 | 27 | 33 | 31 |
| **Vaccines** |  |  |  |  |  |  |
| DPT vaccine | 0 | 0 | 1 | 2 | 4 | 4 |
| Measles vaccine | 0 | 0 | 1 | 1 | 1 | 1 |
| **Curative after birth** |  |  |  |  |  |  |
| ORS - oral rehydration solution | 0 | 0 | 0 | 13 | 22 | 21 |
| Zinc for treatment of diarrhea | 0 | 0 | 0 | 1 | 2 | 2 |
| Vitamin A for treatment of measles | 0 | 0 | 0 | 1 | 0 | 0 |
| Cotrimoxazole | 0 | 0 | 0 | 0 | 0 | 0 |
| ART | 0 | 0 | 0 | 0 | 0 | 0 |

* According to the data analysis from LiST, it was found that the intervention of ITN/IRS - Households protected from malaria (31%) had the largest impact in preventing deaths in children under 5 years of age (0-60 months). Oral rehydration solution (ORS) intervention had the second largest impact by taking 21% in preventing children’s lives.
* ITN/IRS- Households ownership of insecticide treated bednet (ITN) or protected by indoor residual spraying (IRS) intervention refers to percent of households owning at least one insecticide treated bednet (ITN) or protected by indoor residual spraying (IRS).

2) Maternal

**Additional maternal deaths prevented by intervention relative to impact year**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **2009** | **2010** | **2011** | **2012** | **2013** | **%** |
| **Pregnancy** |  |  |  |  |  |  |
| IPTp - Intermittent preventive treatment of malaria during pregnancy | 0 | 0 | 0 | 0 | 0 | 14 |
| Hypertensive disorder case management | 0 | 0 | 0 | 0 | 0 | 4 |
| Malaria case management | 0 | 0 | 0 | 0 | 0 | 0 |
| MgSO4 management of pre-eclampsia | 0 | 0 | 0 | 0 | 0 | 4 |
| **Childbirth** |  |  |  |  |  |  |
| Clean birth practices | 0 | 0 | 0 | 1 | 2 | 78 |

* According to the data analysis from LiST, it was found that the intervention of Clean birth practices (78%) had the largest impact in preventing maternal deaths in 2013.
* Clean birth practices intervention refers to percent of deliveries where clean birth practices are performed, including handwashing by the attendant, cleaning the maternal perineum, using a clean birth surface, cleaning cutting and tying of the cord, and hygienic cord and skin care immediately after delivery.

LESSONS LEARNED

1. Children

* As it is shown in the table above, difference was shown between the level of impact of interventions in saving childhood lives within the catchment area of Nehnwaa project and the national level.
* In terms of preventing childhood (0-60 months) deaths in 2013, the intervention of ITN/IRS had the largest impact within the Nimba County whereas, the same intervention had only 14% in saving lives in the national level. On the other hand, in the national level, the intervention of improving the labor and delivery services had the biggest impact in saving lives of children under the age of 5.
* Such difference might be due to the fact that the number of ITN use, under the project activity of integrated childhood illness management, showed high level of improvement from 46.0% in 2009 to 98.6% in 2013.

2. Maternal

* As it is shown in the table above, difference was shown between the level of impact of interventions in saving maternal lives within the catchment area of Nehnwaa project and the national level.
* Within the Nimba County, the intervention of clean birth practice had the largest impact in preventing maternal deaths in the year 2013. However, the same intervention had only 7% in the national level in the same year. On the other hand, in the national level, the intervention of improving the labor and delivery services had the biggest impact in saving lives of mothers.
* It is worth noticing that there are remarkable difference between national and subnational coverages levels for interventions of clean birth practice and labor & delivery. Such outcome might be due to lack of subnational coverage data for certain interventions.

LIMITATION & CONCLUSION

 One of the main limitations when determining the intervention impact of the Nehnwaa Project is the lack of availability of data source in subnational level. Because the subnational-wizard on LiST makes a projection based on difference in coverage rate between national and subnational level, it is difficult to make an accurate prediction with lacking data. Moreover, despite available data on some of project indicators which were selected by the project researchers, subnational projection through LiST cannot be done since these indicators are not included in default data in the system. However, it is still possible to conclude that the intervention of ITN/IRS uses and clean birth practice had considerable impact in saving lives of Nimba County’s children and mothers, respectively and saving the minimum number of 223 lives.

*Reference 1 – Rapid Catch Indicators*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Indicator** | **Liberia National (2009)** | **Baseline (2009)** | **Mid****(2011)** | **Final (2013)** | **Target** | **Liberia National (2013)** |
| **Integrated Management of Childhood Illnesses (45%)** |
| ***Breastfeeding and Child Nutrition*** |
| Exclusive breastfeeding (0-5 months): Percent of infants aged 0-5 months who were given breast milk only in the 24 hours preceding survey. (*Rapid CATCH*) | 55.1% (< months); 36% (1-5 months) | 39.40% | 54.00% | 52.90% |  | 58.80% |
| IYCF practice indicator (6-23 months): Percent of infants and young children aged 6-23 months fed according to a minimum of appropriate feeding practices. (*Rapid CATCH*) | 24.50% | 17.90% | 3.70% | 61.9% |  | 24.50% |
| Underweight: Percentage of children age 0-23 months who are underweight (-SD for the median weight for age, according to WHO/NCHS reference population). (*Rapid CATCH*) |  | 67.00% | 8.60% | 23.4% |  |  |
| ***Diarrhea Case Management*** |
| ORT Use: Percentage of children age 0-23 months with diarrhea in the last two weeks who received oral rehydration solution and/or recommended home fluids. (*Rapid CATCH*) | 55.60% | 47.90% | 48.00% | 82.70% | 85.00% | 60.40% |
| ***Acute Respiratory Infections*** |
| Appropriate Care Seeking for Pneumonia: Percentage of children age 0-23 months with chest-related cough and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider. (*Rapid CATCH*) | 58.40% | 42.80% | 66.00% | 96.60% | 70.00% | 50.70% |
| ***Malaria Management and Prevention*** |
| Treatment of Fever with ACTs in Malarious Zones: Percentage of children age 0-23 months with a febrile episode during the last two weeks who were treated with ACTs within 24 hours after the fever began. (*Rapid CATCH*) | 16.80% | 2.40% | 22.10% | 86.10% | 60.00% | 16.70% |
| ITN Use: Percentage of children age 0-23 months who slept under an insecticide-treated bed net the previous night. (*Rapid CATCH*) | 47.2 | 46.00% | 79.00% | 98.60% | 85.00% |  |
| ***Water and Sanitation*** |
| Point of Use Water Treatment: Percentage of households of children age 0-23 months that treat water effectively. (*Rapid CATCH*) |  | 13.00% | 30.90% | 26.01% | 60.00% |  |
| Appropriate Hand Washing Practices: Percentage of mothers of children age 0-23 months who live in households with soap at the place for hand washing. (*Rapid CATCH*) | 17.00% | 14.00% | 26.00% | 63.2% |  | 17.00% |
| **Maternal and Newborn Care (30%)** |
| Current Contraceptive Use Among Mothers of Young Children: Percentage of mothers of children age 0-23 months who are using a modern contraceptive method. (*Rapid CATCH*) |  | 2.00% | 13.30% | 61.4% |  |  |
| Quality Antenatal Care: Percentage of mothers of children age 0-23 months who had four or more antenatal visits with a skilled provider and were adequately counseled when they were pregnant with the youngest child. (*Rapid CATCH*) | 70.30% | 24.70% | 49.00% | 73.90% | 65.00% | 77.60% |
| Iron Tablets for Pregnant Women: Percentage of mothers of children age 0-23 months who took iron tablets or syrup before the birth of their youngest child. (*Rapid CATCH*) | 16.10% | 0.67% | 16.60% | 65.3% |  | 21.20% |
| Tetanus Toxoid: Percentage of mothers with children age 0-23 months who received at least 2 tetanus toxoid vaccinations before the birth of their youngest child. (*Rapid CATCH*) | 91.00% | 57.30% | 96.00% | 82.4% |  | 91.00% |
| Skilled Birth Attendant: Percentage of children age 0-23 months whose births were attended by skilled personnel. (*Rapid CATCH*) | 54.20% | 22.70% | 26.60% | 82.50% | 60.00% | 64.10% |
| Post-Natal Visit to Check on the Newborn: Percentage of children age 0-23 months who received a post-natal visit from an appropriate trained health worker within two days after birth. (*Rapid CATCH*) |  | 26.30% | 74.40% | 99.2% |  |  |
| **HIV (15%)** |
| **Expanded Program on Immunizations (10%)** |
| Vitamin A Supplementation: Percentage of children age 6-23 months who received a dose of Vitamin A in the last 6 months: card verified or mother’s recall. (*Rapid CATCH*) | 92.00% | 38.80% | 72.10% | 94.4% |  | 88.00% |
| Measles Vaccination Coverage: Percent of children aged 12-23 months who received measles vaccine according to the vaccination card or mother’s recall by the time of the survey. (*Rapid CATCH*) | 83.00% | 45.30% | 75.70% | 97.0% | 75.00% | 74.00% |
| Access to Immunization Services (DTP1): Percent of children aged 12-23 months who received DTP1 according to the vaccination card or mother’s recall by the time of the survey. (*Rapid CATCH*) |  | 40.10% | 45.80% | 100% | 75.00% |  |
| Health Systems Performance Regarding Immunization Services (DTP3): Percent of children age 12-23 months who received a DTP 3 according to the vaccination card or mother’s recall by the time of the survey (*Rapid CATCH*) | 81.00% | 24.50% | 42.00% | 99.0% |  | 76.00% |

*Reference 2 - Project Indicators*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Indicator** | **Liberia National (2009)** | **Baseline (2009)** | **Mid****(2011)** | **Final (2013)** | **Target** | **Liberia National (2013)** |
| **Integrated Management of Childhood Illnesses (45%)** |
| ***Breastfeeding and Child Nutrition*** |
| Immediate breastfeeding of newborns: Percentage of children age 0-23 months who were put to the breast within one hour of delivery. (*Project Indicator*) |  | 76.20% | 73.00% | 91.3% |  |  |
| Feeding Colostrum: Percentage of children age 0-23 months, who were fed colostrum after birth. (*Project Indicator*) |  | 90.70% | 95.00% | 100% |  |  |
| ***Diarrhea Case Management*** |
| Increased fluid intake during a diarrheal episode: Percent of children 0-23 months with diarrhea in the last two weeks who were offered more fluids during the illness. (*Project Indicator*) |  | 47.90% | 89.00% | 92.9% |  |  |
| Increased food intake during a diarrheal episode: Percent of children 0-23 months with diarrhea in the last two weeks who were offered the same amount or more food during the illness. (*Project Indicator*) |  | 33.80% | 61.60% | 65.1% |  |  |
| Zinc Treatment for Diarrhea: Percent of children 0-23 months with diarrhea in the last two weeks who were treated with zinc supplements. (*Project Indicator*) | 3.1 | 5.60% | 5.40% | 30.90% | 50.00% |  |
| Maternal competency in ORS preparation: Percent of mother who can correctly prepare ORS. (*Project Indicator*) |  | 49.30% | 78.40% | 100% |  |  |
| Maternal hand washing before food preparation: Percent of mothers who usually wash their hands with soap before food preparation, before feeding children, after defecation, and after attending to a child who has defecated. (*Project Indicator*) |  | 4.70% | 72.40% | 97.3% |  |  |
| Percent of households of children age 0-23 months that own at least one insecticide-treated bed net. (*Project Indicator*) |  | 52.50% | 83.30% | 98.9% |  |  |
| Percent of children age 0-23 month with a febrile episode during the last two weeks who were taken to a appropriate place for treatment. (*Project Indicator*) |  | 44.60% | 50.90% | 93.4% |  |  |
| IPT: Percent of mothers of children age 0-23 months who took effective antimalarials during the pregnancy with the youngest child. (*Project Indicator*) | 47.4 | 19.00% | 23.90% | 96.30% | 60.00% |  |
| Mosquito net Use During Pregnancy: Percent of mothers of children age 0-23 months who reported that they slept under a mosquito net all of the time or most of the time during their most recent pregnancy. (*Project Indicator*) |  | 37.70% | 65.00% | 98.3% |  |  |
| ***Water and Sanitation*** |
| Percent of households with an improved source for drinking water. (*Project Indicator*) |  | 63.30% | 85.00% | 99.7% |  |  |
| Percent of households with an improved source for drinking water within acceptable reach and available daily. (*Project Indicator*) |  | 48.30% | 53.10% | 89.7% |  |  |
| Percent of households using an improved toilet facility. (*Project Indicator*)  |  | 24.70% | 42.50% | 95.6% |  |  |
| Percent of households using an improved, accessible and hygienic toilet facility. (*Project Indicator*) |  | 1.20% | 7.30% | 24.03% |  |  |
| Percentage of households where the caretaker of the youngest child 0-23 months reported appropriate handwashing behavior, which is defined as using soap for washing hands during 24 hours recall at 2 critical times or more (after defecation and two of the following 4: after cleaning a young child, before preparing food, before eating, before feeding a child). (*Project Indicator*) |  | 0.30% | 65.00% | 82.7% | 60.00% |  |
| Percent of households that apply effective water treatment regularly. (*Project Indicator*) |  | 0.30% | 9.60% | 21.3% |  |  |
| Percent of households storing drinking water that store water safely. (*Project Indicator*) |  | 11.70% | 30.90% | 74.90% | 60.00% |  |
| Percentage of households that disposed of the youngest child’s feces safely the last time s/he passed stool. (*Project Indicator*) |  | 90.70% | 16.20% | 88.6% |  |  |
| Percentage of households that disposed of the youngest child’s feces appropriately the last time s/he passed stool. (*Project Indicator*) |  | 4.30% | 33.90% | 96.90% | 60.00% |  |
| **Maternal and Newborn Care (30%)** |
| Knowledge of Danger Signs during Pregnancy: Percentage of mothers of children 0-23 months who knew at least two danger signs during pregnancy. (*Project Indicator*) |  | 55.70% | 91.30% | 98.9% |  |  |
| Knowledge of Maternal Danger Signs During Delivery: Percentage of mothers of children 0-23 months who know at least two danger signs during delivery. (*Project Indicator*) |  | 35.70% | 29.90% | 98.6% |  |  |
| Essential Newborn Care: Percentage of children age 0-23 who received all three elements of essential newborn care: thermal protection immediately after birth, clean cord care, and immediate and exclusive breastfeeding. (*Project Indicator*) |  | 34.00% | 64.50% | 85.9% | 60.00% |  |
| Knowledge of Post-partum Danger Signs: Percentage of mothers of children age 0-23 months who knew at least two post-partum danger signs. (*Project Indicator*) |  | 47.70% | 87.00% | 98.3% |  |  |
| Post-Partum Visit for the Mother: Percentage of mothers of children age 0-23 who received a post-partum visit from an appropriate trained health worker within two days after the birth of the youngest child. (*Project Indicator*) |  | 9.30% | 17.20% | 58.10% | 60.00% |  |
| Knowledge of Neonatal Danger Signs: Percentage of mothers of children age 0-23 who know at least two neonatal danger signs. (*Project Indicator*) |  | 37.30% | 93.70% | 100% |  |  |
| Maternal Knowledge of Child Danger Signs: Percent of mothers of children aged 0-23 months who know at least two signs of childhood illness that indicate the need for treatment. (*Project Indicator*) |  | 60.30% | 96.00% | 99.7% |  |  |
| **HIV (15%)** |
| Knowledge of MTCT of HIV: Percentage of mothers of children age 0-23 months who know that HIV can be transmitted from an HIV-positive mother to her unborn child during pregnancy, during delivery, and through breastfeeding. (*Project Indicator*) |  | 32.70% | 75.40% | 98.6% |  |  |
| Knowledge of PMTCT of HIV: Percentage mothers of children age 0-23 months who know that there are special medications that can be given to a pregnant woman infected with HIV to reduce the risk of mother-to-child transmission. (*Project Indicator*) |  | 28.70% | 75.70% | 96.9% |  |  |
| HIV Testing During Pregnancy: Percentage of mothers of children 0-23 months who were counseled about HIV during the pregnancy, accepted an offer of testing, and received their test results when they were pregnant with their youngest child. (*Project Indicator*) |  | 20.30% | 68.10% | 96.90% | 75.00% |  |