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2007 Outcome Monitoring Survey: USAID/Madagascar Programs

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Acronyms

ADRA	Adventist Development and Relief Agency
ANC	antenatal care
ARI	acute respiratory infection
CRS	Catholic Relief Services
CS	Cooperating Sponsor
CSB	centre de sante de base
DHS	Demographic and Health Survey
DTP (DTP3)	diphtheria, tetanus and pertussis (3rd dose)
FANTA	Food and Nutrition Technical Assistance
FP	family planning
HIV	human immunodeficiency virus
HPN	Health, Population and Nutrition
IEC	information, education and communication
IMCI	integrated management of childhood illness
IPT	intermittent preventive treatment
IR	Intermediate Result
ITN	insecticide-treated bednet
IYCF	infant and young child feeding
LLTN	long-lasting treated net
LQAS	lot quality assurance sampling
MCDI	Medical Care Development International
MCH	Maternal and Child Health
OM	Outcome Monitoring
ORS	oral rehydration solution
PMA	program management area

PMTCT	prevention of mother-to-child transmission
PP	post-partum
PPT	percentage-point
PSI	Population Services International
RH	reproductive health
SO	Strategic Objective
SRS	simple random sampling
SP	sulfadoxine-pyrimethamine
STI	sexually transmitted infection
TT	tetanus toxoid
USAID	United States Agency for International Development
USAID/GH	United States Agency for International Development Bureau for Global Health
VCT	voluntary counseling and testing
WAZ	weight-for-age z-score

A. INTRODUCTION

The USAID Bureau for Global Health (USAID/GH) and Bureau for Democracy, Conflict and Humanitarian Assistance/Office of Food for Peace in Washington, and USAID/Madagascar are supporting a variety of interventions in designated areas targeting the health and nutrition of the Malagasy population. To allow the USG to monitor the key health activities it supports and to facilitate the management of those activities in-country, USAID is piloting an Outcome Monitoring (OM) Survey in Madagascar.

OM Surveys collect data on the key Mission Strategic Objective (SO5) and Intermediate Result (IR) indicators, but also allow annual reporting to USAID/W required under the USG Foreign Assistance Framework. Data collected facilitates the tracking of program performance and the monitoring of quality and outcome of services and interventions delivered. OM Surveys also help to identify under-performing services and interventions, and offer recommendations to overcome identified challenges.

Mission HPN Program

USAID-funded health services and products in Madagascar are provided by the Health, Population and Nutrition (HPN) Program in the areas of Malaria, Maternal and Child Health (MCH), Family Planning (FP), human immunodeficiency virus (HIV)/sexually transmitted infections (STIs) and Water and Sanitation.[1] The Mission's SO5, "Increased use of selected health services and products and improved practices," is composed of four IRs:

IR1: Demand for selected health services and products increased
IR2: Availability of selected health services and products increased
IR3: Quality of selected health services and products improved
IR4: Institutional capacity to implement and evaluate health programs improved

IRs 1, 2 and 3 are covered by this OM Survey. IR 4 was not included as it is not easily evaluated using survey instruments.

Indicators Collected by the OM Survey in Madagascar

The OM Survey collects several sets of indicators. First, USAID/GH utilizes a set of 18 indicators covering key aspects of malaria, MCH and FP interventions. Second, the Mission HPN Program utilizes its own set of indicators to track SO5 performance and report to USAID/GH in Washington. The GH and Mission indicators are detailed in Table 1 and 2, below.

[1] This year's OM survey in Madagascar was conducted as a collaboration between FANTA and the Health Improvement Project (HIP). The HIP survey collected detailed information on water and sanitation issues, and reporting on those indicators falls under the responsibility of HIP. Those indicators are therefore not included in this report.

Table 1. GH-defined Outcome Monitoring Indicators

Health Area	Indicator
Malaria	**1**. % of households with a child(ren) 0-59 months with at least one ITN
	2. % of children 0-59 months in malaria-risk areas reported as sleeping under ITN the previous night
	3. % of women who received two or more doses of SP for IPT for malaria during their pregnancy with reference child
	4. % of children 0-59 months with fever in last 2 weeks who received antimalarial treatment within 24 hours from onset of fever
MCHN	**5**. % of women who gave birth who had a post-partum visit within 3 days
	6. % of newborns receiving essential newborn care
	7. % of women seen at antenatal clinic (ANC) at least 4 times during their pregnancy with reference child
	8. % of births attended by a doctor, nurse or trained midwife (excludes traditional birth attendants)
	9. % of children between 12-23 months of age who received their third dose of DTP by age 12 months
	10. % of children age 12-23 months receiving a vitamin A supplement during the last six months before the survey
	11. % of children 0-59 months who are more than 2 SD below the median weight for that age
	12. % of infants aged 0-5 months who were exclusively breast-fed in the past 24 hours
	13. % of children aged 0-59 months with diarrhea in the past 2 weeks who were treated with ORS (same as Mission's "% of children diagnosed/treated according to IMCI guidelines," which uses diarrhea treatment as a proxy.)[2]
	14. % of children aged 0-59 months with chest-related cough and fast and/or difficult breathing in the last 2 weeks who were taken to an appropriate health provider
	15. % of children ages 12-23 months fed according to a minimum standard of infant and young child feeding practices.
Family Planning	**16**. % of women of reproductive age and sexually active using, or whose partner is using, a modern method of contraception
	17. % of need satisfied by modern method of family planning
	18. % of women of reproductive age stating their desire to space birth intervals 36 months or longer, or to limit births

Table 2. Mission-defined Outcome Monitoring Indicators

Health Area	Indicator
Malaria	**1.** % of women who know how malaria is transmitted
	2. % of women who know that pregnant women and children under five are at greatest risk if they have malaria
	3. % of women who know at least two effective ways of preventing against malaria
	4. % of women who recognize two danger signs associated with malaria
	5. % of women who know the proper treatment to give to a child with malaria
	6. % of women who state knowing where to obtain a Long Lasting Treated Net (LLTN) nearby
	7. % of women who state that the price of the locally promoted LLTN is affordable
	8. % of women who state knowing the locally promoted malaria prophylaxis
	9. % of women who state knowing where to obtain the locally promoted malaria prophylaxis nearby
	10. % of women who state that the price of the locally promoted malaria prophylax is affordable
MCHN	**11.** % of women who received two TT shots (or equivalent) during their pregnancy
	12. % of women who gave colostrums to their child immediately after birth
	13. % of women for whom a clean delivery kit or equivalent was used at the birth of their child
	14. % of women who can cite at least 3 ways in which they can protect their health and the health of their baby during pregnancy
	15. % of women who state they took iron folate once a day during their entire pregnancy
	16. % of women who state they took Vitamin A less than 40 days after delivery of their child
	17. % of women who state knowing where to obtain Vitamin A nearby
	18. % of women who state knowing where to obtain iron folate \nearby
	19. % of women who can state at least one source of food rich in Vitamin A
Family Planning	**20.** % of women who state knowing at least one modern family planning method
	21. % of women who state knowing about the contraceptive pill
	22. % of women who state knowing where to obtain contraceptive pills nearby
	23. % of women who state that the price of contraceptive pills is affordable

[2] Proxied by the "% of respondents stating at least two things to do when a child has diarrhea.

HIV/STIs	**24.** % of women who state knowing about HIV
	25. % of women who can describe HIV correctly
	26. % of women who know how HIV is transmitted
	27. % of women who know two ways to avoid being infected by HIV
	28. % of women who state knowing about other STIs

In addition, USAID/Madagascar identifies a number of indicators to monitor the performance, across the HPN Program, of implementing partners in improving Madagascar health centers' delivery of health services and products. Most of these additional indicators derive from the list of standards expected to be met by health centers, or Centres de Sante de Base (CSBs), supported by a large bilateral implementing partner, SanteNet, within the "Champion Communes" (*Kominina Mendrika*) framework. These additional performance monitoring indicators are listed in Annex 2.

Population and Facility-based Components

The OM Survey consists of two separate components. The first focuses on the target population who receives services or otherwise benefits from the services of USAID-funded health partners. The second focuses on health centers where products and services are provided.

The **population-based component** is meant to assess the **coverage and utilization of services and products** by target beneficiaries (SO level), as well as the **demand for and availability of services and products** at the household level (IR1 and IR2). The population-based component also collects data on the target population's knowledge about and access to products and services, as well as their health practices in specific program areas.

The **facility-based component** is meant to assess the **quality of service provision** (IR3) by USAID partners at health centers. This component collects data on the management systems and on the human and physical resources present in the health centers.

Both components cover the same program interventions except malaria, for which few activities are carried out through health centers. This is illustrated in Table 3 below.

Table 3. OM Survey: Population- and Facility-based Components

Mission program areas	Population-based component	Facility-based component
Malaria	√	
Maternal and Child Health	√	√
Family Planning	√	√
HIV/STIs	√	√

Mission Partners Covered by the Survey

The services and products supported by USAID/Madagascar are provided through a number of complex institutional arrangements:

- SanteNet, the Mission's SO5 bilateral program implemented by Chemonics, provides services and products through community-based agents linked to CSBs in four of the six provinces of the country (Antananarivo, Fianarantsoa, Toamasina and Toliara). It aims to create demand for health services and mobilizes the community to actively engage in improving its own health through a "Champion Commune" (*Kominina Mendrika*) approach.

By the end of FY2007, SanteNet was providing direct support to 34 Communes, and, through its agreement with the partner groups listed below, to 197 Communes in total.

- Two partners, Adventist Development and Relief Agency (ADRA) and Medical Care Development International (MCDI), receive Child Survival grants to carry out focused interventions in 12 Communes,where they work in collaboration with SanteNet.

- Three Title II Cooperating Sponsors (CSs), ADRA, CARE and Catholic Relief Services (CRS) incorporate HPN activities as part of their food security programs. The Title II CSs work in 50 Communes where SanteNet is active.

- A number of local, USAID-funded partners known collectively as *Voahary Salama,* work in 101 Communes, also in coordination with SanteNet.

- Population Services International (PSI) promotes the availability and use of FP and other health products (contraceptives, malaria prophylaxis, long-lasting treated nets (LLTNs), water purifiers and treatments for STIs) via social marketing campaigns and the organization of product distribution through private commercial operators. PSI also works to create demand and improve the quality of services though training, information, education and communication (IEC) and support to a network of private clinics. While not a focus of the OM Survey, PSI supports SanteNet and other organizations in Communes in which its partners are working to ensure availability of key products.

B. METHODOLOGY

LQAS

A modified Lot Quality Assurance Sampling (LQAS) approach was used for cost effectiveness and ease of implementation in setting up the OM Survey in Madagascar.

LQAS is a sampling approach and analysis tool that originated in industry as a quality assurance method, and is now increasingly applied in international health programs by USAID and its partners. LQAS is based on binomial statistical theory: after selecting a small simple random sample from a given universe (a batch or *lot* of goods made by a machine, or a group/lot of beneficiaries targeted by a development intervention), sampled items or persons are tested for compliance with a given attribute. The outcome of this test is always dichotomous (e.g., pass/fail, Y/N, whether the attribute is present or not). Summing up the number of "passes" in the sample allows to determine whether the lot as a whole complies with a given standard, or benchmark (e.g. is the immunization coverage above 80% or not?). In the context of development interventions, aspects such as beneficiary satisfaction or adoption of recommended practices can be tracked with LQAS to assess whether expected performance levels are attained. Determining which objectives have been met and which have not can help program managers determine how to improve overall program performance.

The key advantage of the LQAS approach is the small sample size required. By setting upper and lower benchmarks to reflect acceptable and unacceptable levels of performance, only a small sample (typically, n=19) is needed to assess whether the desired performance benchmark has been met. The small sample size required by LQAS facilitates the assessment of program performance by individual program management area (PMA), as well as the monitoring of program outcomes on an annual basis. A disadvantage of the small sample size is that it is not possible to disaggregate the data or conduct analyses such as controlling for confounding variables. The LQA sample is already maximally efficient, so any further stratification of that sample—by gender or wealth, for instance—or any reduction from the desired sample size because of non-response, will decrease the number of valid (Yes/No) answers to a point where the validity of the results rapidly becomes questionable.

Another benefit of LQAS is that it can be used for parameter estimation provided that LQA samples of at least n=19 are collected in four or more PMAs. This might occur, for example, if a survey collected the same information in the four districts of a given province, or among four different implementing partners of the same intervention. This design feature makes LQAS-based surveys a valuable alternative for the estimation of common coverage and prevalence indicators, such as immunization rate or the the adoption of a particular practice. Using this feature, the OM Survey allows Missions to (i) test annually whether program objectives are met by individual PMAs; and (ii) estimate the prevalence of key indicators program-wide, allowing program managers to monitor progress at both the PMA and program levels.

Cluster Sampling in LQAS

The OM Survey departs from traditional LQA sampling in its use of cluster rather than simple random sampling (SRS). The work of Valadez and others (1993; 2000) has established that a LQA sample of n=19, selected by simple random sampling (SRS), is sufficient to make a pass/fail judgment with alpha and beta error rates of less than .10 each, when the upper and lower benchmarks have a 30 percentage point difference between them.

It follows that n=19 would be the minimum sample size for each sample group in the OM Survey. Multiplying that by the five sample groups and four PMAs required by the OM approach (see Components of the OM Survey, section 2) yields an overall sample of 380 respondents. If SRS were used to select the sample, it might result in a need to visit up to 380 different locations—raising logistical and cost concerns in a place like Madagascar.

To overcome this problem, the use of cluster sampling was explored as an alternative. FANTA worked with the Department of Biostatistics at Harvard University's School of Public Health to estimate the impact that a cluster sampling approach would have on error rates when using LQAS. Three cluster factorials, selected to provide sample sizes of 19 or more, were tested. These included 4x5, 5x4, and 7x3 (yielding samples of n=20, 20 and 21 respectively). The Harvard study showed that for the 7x3 cluster factorial, at a 30-percentage point difference between upper and lower thresholds, the alpha and beta error rates were maintained at .15 or less provided that intra-cluster correlations for the indicators tested were lower than .20. However, higher rates of intra-cluster correlation would negatively affect the reliability of the findings. Based on the Harvard study, the 7x3 cluster factorial was chosen for this pilot study because it was the most conservative of the three tested (i.e. it had the least effect on error rates). Note also that, as a consequence of this, the basic sample size used in this study is 21—and not the "classic" 19, as per the earlier discussion.

The issue of intra-cluster correlation is currently being tested using empirical data generated by the 2007 OM Surveys in Guatemala and Madagascar to adjust the recommended sample size and/or cluster factorial as necessary.

COMPONENTS OF THE OM SURVEY

As mentioned earlier, the OM Survey incorporates two components: a population-based component and a facility-based component.

POPULATION-BASED COMPONENT

Two key concepts drive sampling in the population-based component of OM: (1) the coverage area is stratified into PMAs, and (2) sample groups are used to represent the target populations for specific indicators.

1. Program Management Areas (PMAs)

The use of PMAs allows flexibility in tailoring the sample so that it is representative of the program under review. The USAID/Madagascar HPN Program is implemented by four discrete partner groups: SanteNet on its own; SanteNet working with Child Survival Grantees; SanteNet working with Title II CSs; and SanteNet working with Voahary Salama (see section A, Mission Partners Covered Under the Survey). Each of these partner groups implements roughly the same set of interventions but in their own discrete subset of the 197 Communes supported by the Mission. Each partner group is, therefore, viewed as a separate PMA. OM is tailored to evaluate and contrast the capacity of each PMA to deliver the packet of services in the Communes it serves (see table 4).

Table 4. Program Management Areas: Partner Groups and Communes

PMA	Partner Groups	Number of Communes
1	SanteNet alone	34
2	SanteNet plus Child Survival Grantees	12
3	SanteNet plus Title II CSs	50
4	SanteNet plus Voahary Salama	101
	Total	**197**

2. Sample Groups

Each indicator collected in the OM Survey requires a specific respondent group so that the sample of n=21 per PMA is complete for that indicator. For instance, the indicator on Exclusive Breastfeeding is collected solely from mothers of children 0 through 5 months of age, and 21 cases per PMA are needed from that sample group to measure the indicator adequately. Similarly, the indicator on Contraceptive Prevalence Rate is collected by interviewing women of reproductive age (15-49 years), of which a sample of n=21 per PMA is again needed. The indicators and their corresponding sample groups are listed below (See table 5):

Table 5. Indicators Collected from Each Sample Group

Sample Group	Indicators this Sample Group will Document
1. Mothers of Children 0-5m	Exclusive Breast Feeding rates
2. Mothers of Children 0-11m	Pre/Postpartum Care, including Birth Attendance, Essential Newborn Care, Pre/Postpartum visits, Vit A, TT, and Iron Folate
3. Mothers of Children 12-23m	Immunization and Vitamin A supplementation of children, Infant and Young Child Feeding
4. Mothers of Children 0-59m	Malaria, Illness management (diarrhea, fever, ARI), Anthropometry (weight for age)
5. Women of Reproductive Age (15-49yrs)	Family Planning, including CPR, Needs Satisfied, Birth Spacing; Reproductive Health

The resulting combination of PMAs and sample groups is illustrated in Table 6, with each cell representing the desired sample of 21 from each sample group in each PMA. This allows assessment of the performance of each PMA in meeting the benchmark for particular indicators; and provides sufficient data to generate the proportion and 95% confidence interval of each variable through the aggregation of samples across PMAs for a particular sample group (n=84). This sampling scheme, therefore, combines the most desirable feature of LQAS, namely its parsimony, with that of means and confidence intervals estimation. In Madagascar, the total number of surveys was 420.

Table 6: Sample Matrix for OM Survey in Madagascar

	Sample Groups					
PMAs	Mothers of children 0-5m	Mothers of children 0-11m	Mothers of children 12-23m	Mothers of children 0-59m	Women of reproductive age (15-49y)	Total
1. SanteNet	21	21	21	21	21	105
2. SanteNet plus Child Survival grantees	21	21	21	21	21	105
3. SanteNet plus Title II CSs	21	21	21	21	21	105
4. SanteNet plus Voahary Salama	21	21	21	21	21	105
TOTAL	84	84	84	84	84	420

3. Respondent Selection for the Population-based Component

In each PMA, 7 clusters were randomly selected using Probability Proportional to Size. In each of those clusters, enumerators were instructed to use the “spin the bottle” method to randomly select the first of 3 cases for each sample group. The second and third cases were selected by choosing the closest households to the right of the first one, walking in a clockwise fashion.

Generally, only one reference child was selected in a sampled household. If two or more children of the desired age range lived in the household, one of them was randomly selected as a reference child for the interview. The only exception to this relates to children who had had either diarrhea, fever or an acute respiratory infection (ARI) in the last two weeks. Given that the “illness indicators” require that the child present the condition in the last two weeks, completing 21 interviews posed a difficulty. It was resolved as follows: a household was first selected randomly based on the age of a particular child and the specific questionnaire for that age group was applied. Once completed, the enumerator asked the mother if the reference child had suffered from one of the three illnesses in the past two weeks (note: if a child presented signs for more than one illness in the last two weeks, only one of them—the most severe—was

documented[3]). If yes, the questionnaire related to that particular illness was applied using that child as reference. If no, the mother was asked if another child in the 0-59 months age range and living in this household had suffered from one of the illnesses in the last two weeks. If yes, the questionnaire related to that particular illness was applied using the second child as reference; if none of the children in the household had shown a sign of illness, then only the initial interview was carried out. This procedure was repeated in every household visited and is the only situation where more than one child could be interviewed in the same household.

4. Analysis of Data for the Population-based Component

Analysis of the data takes advantage of the possibilities offered by the LQAS approach. The samples for each indicator are summed and weighted across PMAs to derive point estimates for the entire USAID program area; and each PMA is tested against the benchmark set for each indicator.

Benchmarks were set by increasing the all-PMA average by 10 percentage points (ppts) and rounding to the nearest 5ppt increment. For instance, if the all-PMA average for an indicator is 63.3%, the benchmark is set at 75% (63.3% + 10% = 73.3%, rounded to the nearest 5ppt increment, i.e. 75%)[4].

The logic driving this approach comes from the peculiar difference between the cumulative probabilities approach used by the pass/fail test, versus the normal distribution approach used in setting the means and confidence intervals of the indicator: a LQAS test for a 60% benchmark, using a lower threshold of 30% and maximum Alpha/Beta errors of 10%, requires that only 10 of the 21 sampled units show a positive answer; this is easy to meet if all PMAs have around 60% of their cases (13 of 21) answering positively. Increasing by 10% is thus useful to distinguish between the PMAs that already meet the benchmark and those that might have a problem in reaching this projected benchmark. It is critical to clarify, however, that all PMAs meeting a benchmark does not eliminate the possibility that more work is needed on this issue. For instance, all PMAs met the benchmark for the indicator ”% of women who gave birth who had a PP visit within 3 days” yet the overall performance of 25.1% was quite low and more efforts are clearly needed in all PMAs on this front, Thus, what the analysis does is (i) to distinguish areas where general efforts are needed (as stated by the weighted average) to bring the situation to a more desirable level; and (ii) to identify which PMAs are most likely to lag behind on this front. Those two pieces of information are, however, quite independent.

FACILITY-BASED COMPONENT

The sampling procedure for the facility-based component uses a standard LQAS approach: a simple random sample of 19 health centers was selected using the list of all 197 Communes in the USAID focus area as a sampling frame, thus making for a relatively reduced small lot of health centers from which to sample[5]. Such a small universe made any further stratification of

[3] When more than one illness is present, it may well be that they are related—signs of fever may relate to ARI and not to malaria, for instance. OM Survey enumerators all had medical training and, therefore, were able to diagnose the main cause of the illness and thus, to appropriately focus their questions on treatment of the child.
[4] Note that ideally, the benchmark for next year would be established by the Mission or partners themselves—the 10% we applied across the board here was a stratagem used in a situation where those yearly targets did not exist. This is an issue that affects “first year” OMs. The discussions that follow the presentation of results to country partners should incorporate the setting of targets, thus clearing the way for agreed upon outyear tests.
[5] There is usually one health center per commune. In cases where there are more than one, one of them is randomly selected to represent that commune.

the sample impractical (i.e. into the 4 partner group PMAs), so only one lot was considered, representing the entire USAID program.

Analysis of the data retains the basic LQAS approach of testing whether or not the health centers, as a whole, pass or fail the benchmark set for them. That benchmark is set at 60% across all indicators for 2007, representing a 10 ppt increase over the 50% benchmark that was tested in 2006's Layers for HPN[6]. This progressive increase is based on an agreement reached with SanteNet in 2006, stating that the first year would set a 50% target on all facility-based indicators; and this would roll up by 10 ppts per year thereafter.

[6] The OM approach was first implemented (under a different name) in Madagascar in 2006. This provides the data against which the 2007 information is contrasted here.

C. GH AND MISSION INDICATORS

Key Reporting Indicators

Results for the OM indicators requested by USAID/GH are listed in Table 6. Results for the indicators used by the USAID/Madagascar HPN Team to report on its activity to Washington are listed in Table 7. The report discusses the indicators and their associated results in Section D.

Table 7. GH-defined Outcome Monitoring Indicators

Health Area	Indicator	Means (Conf. Int.)	Discussed in
Malaria	**1**. % of households with a child(ren) 0-59 months with at least one ITN	64 (48-80)	D1.2
	2. % of children 0-59 months in malaria-risk areas reported as sleeping under ITN the previous night	62 (47-78)	D1.2
	3. % of women who received two or more doses of SP for IPT for malaria during their pregnancy with reference child	52 (40-65)	D2.2
	4. % of children 0-59 months with fever in last 2 weeks who received antimalarial treatment within 24 hours from onset of fever	11 (3-19)	D1.2
MCHN	**5**. % of women who gave birth who had a post-partum visit within 3 days	34 (21-47)	D2.2
	6. % of newborns receiving essential newborn care	45 (32-59)	D2.2
	7. % of women seen at antenatal clinic (ANC) at least 4 times during their pregnancy with reference child	45 (33-57)	D2.2
	8. % of births attended by a doctor, nurse or trained midwife (excludes traditional birth attendants)	39 (23-55)	D2.2
	9. % of children between 12-23 months of age who received their third dose of DTP by age 12 months	87 (77-97)	D2.3
	10. % of children age 12-23 months receiving a vitamin A supplement during the last six months before the survey	88 (79-96)	D2.4
	11. % of children 0-59 months who are more than 2 SD below the median weight for that age	38 (29-47)	D2.4
	12. % of infants aged 0-5 months who were exclusively breast-fed in the past 24 hours	63 (50-76)	D2.4
	13. % of children aged 0-59 months with diarrhea in the past 2 weeks who were treated with ORS (same as Mission's "% of children diagnosed/treated according to IMCI guidelines," which uses diarrhea treatment as a proxy.)[7]	34 (23-45)	D2.3
	14. % of children aged 0-59 months with chest-related cough and fast and/or difficult breathing in the last 2 weeks who were taken to an appropriate health provider	33 (17-49)	D2.3
	15. % of children ages 12-23 months fed according to a minimum standard of infant and young child feeding practices.	44 (32-57)	D4.1
Family Planning[8]	**16**. % of women of reproductive age and sexually active using, or whose partner is using, a modern method of contraception	n/a	n/a
	17. % of need satisfied by modern method of family planning	51 (40-62)	D3.1
	18. % of women of reproductive age stating their desire to space birth intervals 36 months or longer, or to limit births	n/a	n/a

[7] Proxied by the "% of respondents stating at least two things to do when a child has diarrhea.

[8] Two of the three indicators on Family Planning (CPR, and Birth Spacing) are n/a (not available) for this year because a faulty PDA programming statement invalidated the Madagascar data. The issue is now well identified; and changes were made to the data collection procedure to ensure those indicators will be available in the future.

Table 8. Mission-defined Outcome Monitoring Indicators

Health Area	Indicator	Means (Conf. Int.)	Discussed in
Malaria	**1.** % of women who know how malaria is transmitted	78 (67-90)	D1.1
	2. % of women who know that pregnant women and children under five are at greatest risk if they have malaria	43 (30-57)	D1.1
	3. % of women who know at least two effective ways of preventing against malaria	45 (30-60)	D1.1
	4. % of women who recognize two danger signs associated with malaria	51 (41-61)	D1.1
	5. % of women who know the proper treatment to give to a child with malaria	91 (85-98)	D1.1
	6. % of women who state knowing where to obtain a Long Lasting Treated Net (LLTN) nearby	50 (35-65)	D1.1
	7. % of women who state that the price of the locally promoted LLTN is affordable	66 (51-80)	D1.1
	8. % of women who state knowing the locally promoted malaria prophylaxis	76 (64-88)	D1.1
	9. % of women who state knowing where to obtain the locally promoted malaria prophylaxis nearby	81 (68-95)	D1.1
	10. % of women who state that the price of the locally promoted malaria prophylax is affordable	84 (71-97)	D1.1
MCHN	**11.** % of women who received two TT shots (or equivalent) during their pregnancy	54 (40-69)	D2.2
	12. % of women who gave colostrums to their child immediately after birth	90 (84-97)	D2.4
	13. % of women for whom a clean delivery kit or equivalent was used at the birth of their child	83 (73-94)	D2.2
	14. % of women who can cite at least 3 ways in which they can protect their health and the health of their baby during pregnancy	23 (16-31)	D2.1
	15. % of women who state they took iron folate once a day throughout pregnancy	15 (3-27)	D2.2
	16. % of women who state they took Vitamin A less than 8 weeks after delivery of their child	37 (24-50)	D2.2
	17. % of women who state knowing where to obtain Vitamin A nearby	74 (64-85)	D2.1
	18. % of women who state knowing where to obtain iron folate nearby	77 (66-89)	D2.1
	19. % of women who can state at least one source of food rich in Vitamin A	64 (50-80)	D2.4
Family Planning	**20.** % of women who state knowing at least one modern family planning method	87 (77-96)	D3.1
	21. % of women who state knowing about the locally promoted contraceptive pill (PilPlan)	48 (33-63)	D3.1
	22. % of women who state knowing where to obtain the locally promoted contraceptive pills (PilPlan) nearby	33 (23-42)	D3.1
	23. % of women who state that the price of locally promoted contraceptive pills (PilPlan) is affordable	44 (35-53)	D3.1
HIV/STIs	**24.** % of women who state knowing about HIV	89 (82-96)	D4.1
	25. % of women who can describe HIV correctly		
	26. % of women who know how HIV is transmitted	79 (70-89)	D4.1
	27. % of women who know two ways to avoid being infected by HIV	32 (23 41)	D4.1
	28. % of women who state knowing about other STIs	53 (42-65)	D4.1

D. POPULATION-BASED COMPONENT

The population-based component of the OM Survey includes data collected from 420 interviews conducted using a modified LQA sampling methodology in areas where USAID and its partners have activities. This section presents the point estimates on all indicators measured. It also tests PMAs for benchmarks established based on the point estimates (see Section B, Methodology, for more details).

Main Conclusions

The population-based component of the OM Survey collected data on the population's knowledge of and demand for selected health services and products, and the knowledge of and adoption by the population of essential practices in key health areas.

Survey respondents usually had general knowledge of the various services and products available, but detailed knowledge of specific health issues is often lacking as illustrated by the following examples:

- People may know about the transmission mechanisms and dangers of malaria, but many do not recognize the danger signs of malaria when they happen in a child.
- Women of reproductive age know about human immunodeficiency virus (HIV) and how it is transmitted, but few can say how to prevent being infected by HIV.

Such findings indicate the need to deepen knowledge on issues on which a minimum of sensitization already exists. This may require some shift in focus for current IEC strategies.

In general, respondents consider supplies of health products (condoms, SurEau, LLTNs, vitamin A, iron folate, etc.) available and affordable—except for the LLTN Super Moustiquaire, which many felt was not available locally. Further analysis may be needed to understand whether the product is not always present in local commercial outlets or whether respondents simply do not have information about its availability.

The data show that several health practices in the areas of malaria control, antenatal care (ANC) and clean delivery at birth have now been adopted by the majority of the population. In addition, vaccination rates are excellent, as is the semiannual provision of vitamin A capsule supplementation to children. Nevertheless, the gap between knowledge and behavior in the treatment of the sick child remains a serious problem, no matter the illness. Similarly, specific actions need to be reinforced in all areas: in ANC, for instance, women know they should take iron folate every day during their entire pregnancy, but very few do so; with respect to assistance at birth, the number of home deliveries attended and followed by a qualified health practitioner is low. Lastly, practices that used to be common in Madagascar— exclusive breastfeeding is a prime example—appear to be declining rapidly. Thus, in some areas, the work needs to be reinforced; in others, it needs to be sustained as new cohorts of mothers and children come up and the need to inform and encourage them continues.

The contrast between PMAs is useful in suggesting where to direct increased efforts. For instance, one of the PMAs clearly lagged behind others on all malaria control issues, whereas another, which performed well on all ANC aspects, had the poorest results on HIV prevention and infant and young child feeding (IYCF). This highlights the benefit of examining, on a case-

by-case basis, what needs to be done rather than applying blanket approaches to program operations.

The remainder of Section D presents detailed tabulations of the results from the population-based component, accompanied in each case by a brief summary and set of recommendations. Results are presented in the following order:

- D1. Malaria
- D2. Maternal and Child Health
- D3. Family Planning
- D4. HIV and other STIs

The results for the facility-based component are presented in Section E.

D1. MALARIA

The population-based component of the OM Survey collected information on malaria from all households in the 0-59 month sample group.

Conclusions and recommendations, followed by detailed indicator results, are presented for the following areas:

- D1.1 Information and Knowledge on Malaria
- D1.2 Practices in Malaria Prevention and Treatment
- D1.3 Benchmarks for PMA performance
- D1.4 Recommendations

Main Conclusions and Recommendations: Malaria

D1.1: Information and Knowledge on Malaria

- Basic information on malaria is available to most respondents: a large majority (78%) knows the cause of the disease and few have erroneous beliefs about it; yet only a minority (45%) could state two or more preventive measures against it.
- Most respondents (72%) know that the consequences of malaria are especially dangerous for children, but fewer (46%) see those consequences as particularly threatening for pregnant women.
- A large majority (82%) knows that a child with malaria needs medical referral. Ninety-one percent know the appropriate treatment and 93% stated a child with malaria symptoms should be treated within 24 hours. However only half (51%) could state two or more dangers signs of malaria in children.
- Respondents were generally knowledgeable about malaria prophylaxis and about ITNs—including the products promoted by USAID partners (the malaria prophylactic PaluStop and LLTN SuperMoustiquaire). They also know where to find them and think they are affordable. However, respondent perception of the supply of LLTNs appears to be an issue.

D1.2: Practices in Malaria Prevention and Treatment

- Progress has been made in ownership of insecticide-treated bednets (ITNs), with 64% of households with at least one child under the age of five having at least one ITN.
- Approximately two of every three (63%) reference child slept under an ITN the preceding night—in other words, and comparing with the preceding statement, almost every child (98%) living in a household that owns a ITN slept under it.
- Among children who had fever in the last two weeks, about half (48%) received the correct medication but far fewer (11%) received treatment within 24 hours of the onset of the illness.

D1.3: Benchmarks for PMA performance

- With reference to knowledge, PMA 2 did not meet the benchmark in knowledge of USAID-supported products and of appropriate treatment for a child with malaria; PMA 4 did not meet the benchmark in terms of knowing SuperMoustiquaire, and in terms of recognizing malaria danger signs.
- With reference to practices, PMA 2 failed to meet all benchmarks. PMA 4 did not meet the benchmarks for ownership of bednets or having mothers and children sleeping under a bednet the previous night.

D1.4: Recommendations

- Messages related to malaria should be specifically reinforced in all PMAs in relation to (i) caretakers' knowledge of preventive measures, (ii) the particular risk that malaria presents to pregnant women; and (iii) the recognition of malaria danger signs in a child.
- Malaria prophylaxis is generally known, and thought to be available and affordable; but LLTNs—although known and considered affordable—are not always perceived to be available locally. USAID partners ought to study this situation closely and reinforce the supply chain where necessary.
- There is a large discrepancy between knowledge and behavior in relation to the timely treatment of a child with malaria danger signs. Mothers know the importance of initiating the treatment within 24 hours from onset of fever, but few do so. This may relate to the already mentioned low knowledge of malaria danger signs in a child; but could also be related to time availability, accessibility of treatment, negotiation with partner about seeking care, financial constraints, etc. This issue deserves attention.
- PMA 2 is lagging behind others in many critical aspects related to knowledge, access, prevention and treatment of malaria. Geographic reasons may play a role—perhaps the problem is less serious in PMA 2 areas. This is difficult to ascertain given that each PMA covers a diversity of geographic zones—yet the issue deserves close attention.

D1.1 Information and Knowledge on Malaria

Indicators Collected	Total n	Program-wide point estimates				Benchmark Set At (%)	Program Management Area Met Benchmark (Y/N)			
		n	%	Confidence Interval Lower	Upper		PMA 1	PMA 2	PMA 3	PMA 4
% of mothers of children 0-59 months who stated malaria is transmitted by mosquitoes only	84	65	78	67	90	90	N	Y	N	Y
% of mothers of children 0-59 months who stated that children <5 y of age are at greatest risk	84	59	72	61	83	80	Y	Y	Y	Y
% of mothers of children 0-59 months who stated that pregnant women are at greatest risk	84	40	45	32	59	55	Y	Y	Y	Y
% of mothers of children 0-59 months who stated that both children and pregnant women are at greatest risk	84	37	43	30	57	55	N	Y	Y	Y
% of mothers of children 0-59 months who know SuperMoustiquaire	84	71	87	80	95	95	Y	N	Y	Y
% of women who state knowing where to obtain a Long Lasting Treated Net (LLTN) nearby	84	42	50	35	65	60	Y	Y	N	Y
% of women who state that the price of the locally promoted LLTN is affordable	84	50	60	46	74	70	Y	Y	Y	N
% of mothers of children 0-59 months who stated at least 2 ways to prevent malaria	84	38	45	30	60	55	Y	N	Y	N
% of mothers of children 0-59 months who know the locally promoted malaria prophylaxis	84	64	76	64	88	85	Y	N	Y	Y
% of mothers of children 0-59 months who know where to obtain the locally promoted malaria prophylaxis nearby	84	53	61	47	75	85	Y	N	N	N
% of mothers of children 0-59 months who state that the price of the locally promoted malaria prophylax is affordable	84	57	68	57	79	80	Y	Y	Y	N
% of mothers of children 0-59 months who stated that high fever in a child under 5 years needs medical referral	84	70	82	72	92	90	Y	Y	Y	Y
% of mothers of children 0-59 months who can state at least 2 danger signs of malaria	84	47	51	41	61	60	Y	Y	Y	N

in children										
% of mothers of children 0-59 months who stated one should give treatment within 24 h to a child with fever	84	78	93	88	99	95	Y	Y	Y	Y
% of mothers of children 0-59 months who know the appropriate treatment for a child with fever	84	74	91	85	98	95	Y	N	Y	Y

D1.2 Practices in Malaria Prevention and Treatment

Indicators Collected	Total n	Program-wide point estimates		Confidence Interval		Benchmark Set At (%)	Program Management Area Met Benchmark (Y/N)			
		n	%	Lower	Upper		PMA 1	PMA 2	PMA 3	PMA 4
% of households with a child(ren) 0-59 months with at least one ITN	84	52	64	48	80	75	Y	N	Y	N
% of mothers of children 0-59 months who state they slept under an ITN the previous night	84	49	61	45	76	70	Y	N	Y	N
% of children 0-59 months in malaria-risk areas reported as sleeping under an ITN the previous night	84	50	62	47	78	70	Y	N	Y	N
% of mothers of children 0-59 months who state they slept under an ITN during their pregnancy	84	55	72	56	87	80	Y	N	Y	Y
% of children 0-59 months with fever in last 2 weeks who received the appropriate medication during their illness	84	37	48	31	65	60	Y	N	Y	Y
% of children 0-59 months with fever in last 2 weeks who received antimalarial treatment within 24 hours from onset of fever	84	8	11	3	19	20	Y	N	Y	Y

D2. MATERNAL AND CHILD HEALTH (MCH)

The population-based component of the OM Survey collected information on maternal and child health from various sample groups. Questions on ANC and post-partum (PP) care, as well as a question related to early initiation of breastfeeding, were applied to mothers/caregivers of children in the 0-11 month sample group. Questions on exclusive breastfeeding were applied to the 0-5 month sample group. Questions on complementary feeding of the child, Vitamin A supplementation and immunization were directed to mothers of children in the 12-23 month sample group. Questions relative to the treatment of child illnesses and the child's nutritional status (weight for age), were collected to represent children in the 0-59 month sample group.

Conclusions and recommendations, followed by detailed indicator results, are presented for the following areas:

- D2.1 Information and Knowledge on ANC and PP Care
- D2.2 Practices in ANC and PP Care
- D2.3 Practices in Child Health
- D2.4 Practices in Child Nutrition
- D2.5 Benchmarks for PMA performance – ANC and PP Care
- D2.6 Benchmarks for PMA performance - Child Health and Nutrition
- D2.7 Recommendations – ANC and PP Care
- D2.8 Recommendations – Child Health and Nutrition

Main Conclusions and Recommendations: MCH

D2.1: Information and Knowledge on ANC and PP Care

- Most respondents could spontaneously state at least one way a pregnant woman can protect her and her baby's health. Frequent responses include attending at least 3 prenatal consultations (99%); taking iron folate one time per day throughout pregnancy (61%); and getting a tetanus toxoid (TT) vaccination (40%). However, less than one in four respondents (23%) spontaneously named three or more ways a woman can protect her and her baby's health during pregnancy.
- Most respondents (77%) know where to obtain iron folate. Similarly, 74% know where to obtain Vitamin A capsule supplementation.

D2.2: Practices in ANC and PP Care

- The large majority of women (90%) reported being seen at least once at ANC during their pregnancy. About two of every three women (64%) were seen during their first trimester. However, less than half (45%) were seen the recommended four times; and only one in four (27%) were seen four times and had an ANC visit in their first trimester.
- Almost two-thirds of women (63%) took iron folate at some point during their pregnancy. Most took it once per day but only 15% took it once per day throughout pregnancy.
- Two of every three women (66%) had adequate TT immunization (either two shots during their pregnancy or five shots in the last ten years).
- About half (52%) of women received 2 or more doses of sulfadoxine pyrimethane (SP); and 72% slept under an ITN during their pregnancy.

- Less than half of all births (39%) were attended by a qualified service provider. A Clean Delivery Kit or sterilized instrument was used in 83% of all births, suggesting appropriate knowledge on the part of TBAs on this issue.
- About one in three births (34%) were followed by a PP visit by a qualified provider within three days. Most women who delivered at a health center were seen for PP care (27 of 29), but very few who delivered at home (3 of 55) were seen by a qualified provider.
- Slightly less than half of all women (46%) received a dose of Vitamin A post partum. Even fewer (37%) received it within the recommended eight weeks of delivery.
- Essential newborn care practices are followed in about half of all births (52%). This is a composite indicator formed of three practices (dry the child immediately after birth; wrap the child in a warm blanket immediately after birth; and put the child to breast within one hour of birth). The first two actions (drying and warming) are widely practiced (88% and 96% respectively) but not the third (53%)—although we note that 87% of children were put to breast within eight hours of birth.

D2.3: Practices in Child Health

- Immunization rates are high in USAID areas, with 87% of children 12-23 months having received their third diphtheria, tetanus, pertussis (DTP) vaccine by 12 months of age.
- Care of the sick child, however, is a cause for concern: only one-third of children (34%) were given ORS during their last diarrhea episode (which happened in the last 2 weeks); and a similar proportion (33%) was taken to an appropriate health provider when they last showed ARI symptoms.

D2.4: Practices in Child Nutrition

- Most mothers (90%) appear to be aware of the benefits of giving colostrum to the child. However, a large proportion (37%) gave something other than breast milk to the child in the first three days after delivery.
- Exclusive breastfeeding appears to be declining in USAID focus areas, with 63% of mothers stating having given only breast milk to their child less than 6 months of age in the last 24 hours (compared to more than 80% in 2006).
- A large proportion of children in the 12-23 month sample age group (84%) received at least one vitamin A-rich food in the last 24 hours; while half (51%) received at least one iron-rich food.
- Most children in the 12-23 month sample age group (70%) were fed at least the recommended number of times in the last 24 hours, but fewer (56%) were fed the recommended minimum number of food groups. Less than half of all children (44%) were fed according to a minimum of three appropriate feeding practices in the last 24 hours.
- The great majority of children (88%) received vitamin A capsule supplementation in the last 6 months
- Malnutrition remains high in USAID areas, with 38% of children 0-59 months having low weight-for-age z-score (WAZ < 2).

D2.5: Benchmarks for PMA Performance – ANC and Post-Partum Care

- All PMAs performed well at the level of knowledge of ANC, and perceived access to products.
- With reference to practices, PMA 1 did not meet the benchmarks in relation to ANC visits; taking iron folate during pregnancy, birth attendance by a qualified provider, and Essential Newborn Care. PMA 2 did not meet the benchmarks for malaria protection during pregnancy (consistent with the findings in the malaria section), and PMA 4 did not meet the TT vaccination or Essential Newborn Care benchmarks. PMA 3 met all benchmarks.

D2.6: Benchmarks for PMA performance – Child Health and Nutrition

- PMA 1 did well on the nutrition indicators, except in relation to underweight prevalence. Similarly, PMA 2 performed well in all regards (including prevalence of underweight) but it did not meet the benchmark in relation to pre-lacteal feeds. PMA 3 did not meet benchmarks for complementary feeding (especially with the minimum number of times a child should be fed) and underweight prevalence. PMA 4 is where the greatest efforts are needed in improving nutrition practices since it failed to meet most benchmarks—although the prevalence of underweight met the established benchmark.

D2.7: Recommendations – ANC and Post-Partum Care

- Availability and access to ANC services is good across all sites, but messages should be reinforced to increase women's knowledge of the ways in which they can protect their and their baby's health during pregnancy.
- Women are aware of the importance of ANC visits, but messages must be reiterated to increase the compliance with 4 visits during pregnancy, and to make the first visit during the first trimester. Several reasons may explain why those aspects lag behind (e.g. awareness of being pregnant in the first trimester; availability/distance of ANC services; change to the "4 visits" norm, compared to the earlier norm, which emphasized 3 visits). A special study may be required to identify the exact cause for lack of compliance in those regards.
- Women know that they need to take iron folate, and most do, but not according to the recommended norms. This aspect must be addressed more aggressively.
- Much greater effort is needed to ensure a post partum visit is made within three days of home deliveries. Likewise, the provision of Vitamin A within 8 weeks after delivery could be improved considerably.
- Essential Newborn Care practices are almost entirely adopted, except for the practice of breastfeeding the child immediately after birth. It may be worth studying the reasons for this (e.g. cultural beliefs, lack of information) to correctly address the issue and tailor messages accordingly. This may be easy to accomplish, since 87% of children were breastfed within 8 hours of birth.

D2.8: Recommendations – Child Health and Nutrition

- The practice of giving pre-lacteal feeds to infants within 3 days of birth is still widespread. Messages in this regard must be reinforced. They should be based on a good understanding of cultural beliefs in this regard, and of the exact food that is given to the child.
- The progressive decline in exclusive breastfeeding rates is alarming. Efforts must be made to emphasize the benefits of exclusive breastfeeding more consistently.
- The proportion of children fed according to a minimum of appropriate feeding practices is less than half (48%). This situation should be urgently studied and addressed, as it may be an important factor in the high rates of malnutrition still recorded in Madagascar.
- The excellent rates of immunization and vitamin A supplementation should be maintained and encouraged.
- Consistent and large-scale efforts are needed to change caretakers' practices concerning child illnesses. In all three types of diseases observed (fever, ARI and diarrhea), only a third of children were appropriately treated. Illness interacts with poor diet in critical ways in creating malnutrition among children, and the low rates of proper practices in both cases provide strong indications of where resources should be directed.

D2.1 Information and Knowledge on ANC and PP Care

Indicators Collected	Total n	Program-wide point estimates n	%	Confidence Interval Lower	Upper	Benchmark Set At (%)	Program Management Area Met Benchmark (Y/N) PMA 1	PMA 2	PMA 3	PMA 4
% of women who stated at least 3 ways in which a woman can protect her health and the health of her baby during pregnancy	84	21	23	16	31	35	Y	Y	Y	Y
% of women who stated knowing where to obtain iron folate nearby	84	67	77	66	88	85	Y	Y	Y	Y
% of women who stated knowing where to obtain Vitamin A	84	63	74	64	85	85	Y	Y	Y	Y

D2.2 Practices in ANC and PP Care

Indicators Collected	Total n	Program-wide point estimates n	%	Confidence Interval Lower	Upper	Benchmark Set At (%)	Program Management Area Met Benchmark (Y/N) PMA 1	PMA 2	PMA 3	PMA 4
% of women seen at ANC at least one time during their pregnancy with the reference child	84	75	90	82	97	95	N	Y	Y	Y
% of women seen at ANC during their first trimester of pregnancy	84	53	64	53	75	75	N	Y	Y	Y
% of women seen at ANC at least 4 times during their pregnancy with reference child	84	38	45	33	57	55	Y	Y	Y	Y
% of women seen at ANC at least 4 times during their pregnancy with reference child and who were seen during their first trimester of pregnancy	84	22	27	17	37	35	Y	Y	Y	Y
% of women who took iron/folate during their pregnancy with reference child	84	54	63	52	74	75	N	Y	Y	Y
% of women who took iron/folate once per day during their pregnancy with reference child	84	52	62	56	68	70	N	Y	Y	Y
% of women who took iron/folate once per day throughout pregnancy with reference child	84	13	15	3	27	25	Y	N	Y	N
% ofwomen who received at least 2 TT injections during their pregnancy with reference child	84	46	54	40	69	65	Y	Y	Y	Y
% of women who received at least 2 TT injections during their pregnancy, or 5 injections in total before and during pregnancy with reference child	84	58	66	53	78	75	Y	Y	Y	N
% of women who received two or more doses of SP for IPT for malaria during their pregnancy with reference child (OM 3)	84	41	52	40	65	65	Y	N	Y	Y
% of women who stated sleeping under an ITN during their pregnancy with reference child	84	55	72	56	87	85	Y	N	Y	Y
% of births attended by a doctor, nurse or trained midwife (excludes traditional birth attendants) (OM 8)	84	33	39	23	55	50	N	Y	Y	Y
% of women who stated that a Clean Delivery Kit or new or boiled instrument was used during delivery of reference child	84	68	83	73	94	95	Y	N	Y	Y
% of women who gave birth who had a PP visit within 3 days (OM 5)	84	30	34	21	47	45	Y	Y	Y	Y
% of women who gave birth who received a dose of Vitamin A less than 8 weeks after delivery of the reference child	84	31	37	24	50	45	Y	Y	Y	Y
% of newborns receiving essential newborn care (OM 6)	84	41	45	32	59	55	N	Y	Y	N
% of children 0-11 months dried/wiped immediately after birth	84	75	88	80	96	85	Y	Y	Y	Y
% of children 0-11 months wrapped in a warm cloth or blanket immediately after birth	84	82	96	0	0	95	Y	Y	Y	Y
% of children 0-11 months breastfed within one hour of delivery	84	46	52	39	65	65	N	Y	Y	N
% of children 0-11 months breastfed within eight hours of delivery	84	74	87	78	97	95	Y	Y	Y	Y

D2.3 Practices in Child Health

Indicators Collected	Total n	Program-wide point estimates n	%	Confidence Interval Lower	Upper	Benchmark Set At (%)	Program Management Area Met Benchmark(Y/N) PMA 1	PMA 2	PMA 3	PMA 4

% of children between 12-23 months who received their third dose of DTP by 12 months	84	74	87	77	97	95	Y	Y	Y	Y
% of children 0-59 months with diarrhea in the past two weeks who were treated with ORS	84	26	34	23	45	45	Y	N	Y	Y
% of children 0-59 months with chest-related cough and/or difficult breathing in the last two weeks who were taken to an appropriate health provider	51	17	33	17	49	45				

D2.4 Practices in Child Nutrition

Indicators Collected	Total n	Program-wide point estimates		Confidence Interval		Benchmark Set At (%)	Program Management Area Met Benchmark (Y/N)			
		n	%	Lower	Upper		PMA 1	PMA 2	PMA 3	PMA 4
% of women who gave colostrum to reference child	84	76	90	84	97	95	Y	Y	Y	Y
% of women who gave something other than breast milk to reference child in first 3 days	84	28	37	23	50	45	Y	N	N	Y
% of infants 0-6 months who were exclusively breastfed in the last 24 hours	84	57	63	50	76	75	Y	Y	Y	N
% of women who can state at least one source of food rich in Vitamin A	84	58	64	50	80	75	Y	Y	Y	N
% Gave at least 1 Vitamin A rich food to child in last 24 h	84	73	84	76	93	95	Y	Y	Y	N
% Gave at least 1 iron rich food to child in last 24 h	84	47	51	36	67	60	Y	Y	Y	N
% Are currently breastfeeding the child 12-23 m sample	84	67	75	63	87	85	Y	Y	Y	N
% Breastfed or non-breastfed child ate at least the recommended minimum times in last 24 h	84	63	70	58	83	80	Y	Y	Y	N
% Breastfed or non-breastfed child ate from at least the recommended minimum number of food groups in last 24 h	84	52	56	44	68	65	Y	Y	Y	N
% of children 12-23 months fed according to a minimum standard of infant and young child feeding practices	84	43	44	32	57	55	Y	Y	N	N
% of children 12-23 months receiving a vitamin A supplement during the last six months before the survey.	84	74	88	79	96	95	Y	Y	Y	Y
% of children 0-59 months who are more than 2 SD below the median weight for that age	84	52	38	29	47	30	N	Y	N	Y

D3. FAMILY PLANNING (FP)

The population-based component of the OM Survey collected information on Family Planning (FP) from all women in the 15-49 year sample group. Due to problems in the design of the questionnaire, data on key family planning practices (contraceptive prevalence rate, Birth Spacing and Needs Met) is unavailable from this year's dataset.

Conclusions and recommendations, followed by detailed indicator results, are presented for the following areas:

- D3.1 Information and Knowledge on FP
- D3.2 Practices in FP
- D3.3 Benchmarks for PMA performance
- D3.4 Recommendation

Main Conclusions and Recommendations: FP

D3.1: Information and Knowledge on FP

- Most people (87%) know about family planning methods, however, fewer than half (47%) could name three or more modern family planning methods.
- PilPlan, the contraceptive pill supported by USAID, is relatively well known and about half of respondents (48%) were able to recognize it and its purpose. Those who know about PilPlan generally stated they can find it nearby and think it is affordable.

D3.2: Practices in FP

- As mentioned earlier, two of the three key indicators on FP (CPR and Birth Spacing) were invalidated due to faulty PDA programming.
- About half of all women (51%) who desire to reduce the number of pregnancies, or who do not want any more children, currently use a modern FP method.

D3.3: Benchmarks for PMA Performance

- PMA 1 and 3 met all benchmarks in relation to FP. PMA 2 and PMA 4 did not meet benchmarks related to knowledge of PilPlan.

D 3.4: Recommendations

- FANTA will correct the problems noted this year in relation to collecting data on family planning indicators.
- Social marketing of USAID-supported products is yielding good results, but efforts to sustain and increase awareness of those products should continue, especially in PMA 4.
- Meeting all FP needs with efficient, modern methods will require important efforts on the part of all partners. As discussed above and in the Facility Based section, most FP products are available locally and considered affordable; yet half of the women that desire to control their number of births do not avail themselves of those methods. It will be critical to understand why this is so; and to put in place interventions that address the reasons for this gap.

D3.1 Information and Knowledge on FP

Indicators Collected	Total n	Program-wide point estimates				Benchmark Set At (%)	Program Management Area Met Benchmark (Y/N)			
		n	%	Confidence Interval Lower	Upper		PMA1	PMA2	PMA3	PMA4
% of women who state knowing at least one family planning method	84	73	87	77	96	95	Y	Y	Y	Y
% of women who stated at least 3 modern family planning methods	84	39	47	33	60	55	Y	Y	Y	Y
% of women who state knowing about the locally promoted contraceptive pill (PilPlan)	84	40	48	33	63	60	Y	N	Y	N
% of women who state knowing where to obtain the locally promoted contraceptive pills (PilPlan) nearby	84	28	33	23	42	45	Y	N	Y	N
% of women who state that the price of locally promoted contraceptive pills (PilPlan) is affordable	84	37	44	35	53	55	Y	N	Y	N
% of need satisfied by modern method of family planning	84	43	51	40	62	60	Y	Y	Y	Y

D4. HIV AND STIS

The population-based component of the OM Survey collected information on HIV and STIs from all women in the 15-49 year sample group.

Conclusions and recommendations, followed by detailed indicator results, are presented for the following areas:

- D4.1 Knowledge and information on HIV and STIs
- D4.2 Practices in prevention of HIV and STIs
- D4.3 Benchmarks for PMA performance
- D4.4 Recommendations

Main Conclusions and Recommendations: HIV and STIs

D4.1: Knowledge and information on HIV and STIs

- Of those interviewed, 89% knew about HIV, while 79% correctly identified at least one way it is transmitted. However, fewer respondents (32%) could state two or more ways to prevent HIV infection.
- Only half (53%) said they had heard of STIs other than HIV.
- About two thirds of respondents (66.8%) knew about Protector Plus, the condom brand supported by USAID and its partners.

D4.2: Practices in prevention of HIV and STIs

- Sixteen percent of people mentioned having had a non-regular sexual partner in the last 12 months.

D4.3: Benchmarks for PMA performance

- PMA 1 met all benchmarks in relation to HIV and other STIs. PMA 2 did not meet some of the benchmarks related to knowledge of other STIs. The latter was not met by PMA 3 either; nor was the knowledge of how to prevent HIV infection. PMA 4 met all benchmarks except those related to the Protector Plus, the product promoted by USAID and its partners.

D4.4: Recommendations

- Partners in the field should increase knowledge of ways to avoid HIV infection.
- Increased information should also be disseminated about STIs, their risks and methods of treatment.
- Social marketing of USAID-supported products is yielding good results, but efforts to sustain and increase awareness of those products should continue, especially in PMA 4.

D4.1 Knowledge and Information on HIV and STIs

Indicators Collected	Total N	Program-wide point estimates		Confidence Interval		Benchmark Set At (%)	Program Management Area Met Benchmark (Y/N)			
		N	%	Lower	Upper		PMA1	PMA2	PMA3	PMA4
% of women who stated knowing about HIV	84	76	89	82	96	95	Y	Y	Y	Y
% of women who know two ways to avoid being infected by HIV	84	28	32	23	41	40	Y	Y	Y	Y

% of women who stated at least 1 way HIV is transmitted	84	68	79	70	89	90	Y	Y	Y	Y
%of women who know how HIV is transmitted	84	68	79	70	89	90	Y	Y	Y	Y
% of women who know how to avoid being infected by HIV	84	28	32	23	41	45	Y	Y	N	Y
% of women who stated knowing of other STIs	84	44	53	42	65	65	Y	N	N	Y
% of women who stated knowing Protector Plus	84	57	67	52	82	75	Y	Y	Y	N

D4.2 Practices in prevention of HIV and STIs

Indicators Collected[9]	Total N	Program-wide point estimates		Confidence Interval		Benchmark Set At (%)	Program Management Area Met Benchmark (Y/N)			
		N	%	Lower	Upper		PMA1	PMA2	PMA3	PMA4
% of women who stated having had sex with non-regular sexual partner in last 12 months	84	11	16	6	26	10	Y	Y	Y	N
% of women who stated having had sex with non-regular sexual partner in last 12 months and used a condom[10]	11	2	18%	18	18	-	-	-	-	-
% of women who stated having had STI problem in the last 12 months	84	8	11	-1	23	5	Y	Y	Y	Y

[9] The low prevalence of those indicators (less than 30) creates a problem for LQAS. Recall that we use a 30 percentage point difference between the lower and upper thresholds (LT/UT) implying that, any indicator with an UT lower than 30 will have a negative LT. Since the LQAS test requires a positive LT, the only way to perform it is to reduce the difference between UT and LT—which immediately results in inflating the size of the sample. As our sample was already collected, we cannot test those indicators when the UT is less than 30. The problem also reverberates on future years, as the UT will remain below 30.

[10] No reliable statistics can be derived from this indicator, given the very small number of women who said they had sex with a non regular partner in the last twelve months. A "dedicated" sample of n=21 per PMA would be required to document this indicator, and the difficulty of identifying qualified respondents would make it costly to collect.

E. FACILITY-BASED COMPONENT

The facility-based component of the OM Survey includes data collected from 19 health centers selected randomly from the Communes where USAID and its partners have activities. Because of the small sample size, no comparisons were made among PMAs. Instead, an assessment was made of the performance of the health centers overall across all PMAs. Through consultations with the Mission and partners, a benchmark of 60% was set as standard for all indicators. If the health centers, collectively, met the 60% benchmark, the performance was deemed satisfactory. Conversely, if they failed to meet the 60% benchmark, the performance was deemed unsatisfactory. Data was collected on the health areas specified below:

- E1. General Conditions at the Facility
- E2. Maternal and Child Health
- E3. Family Planning
- E4. HIV and STIs

Main Conclusions

The facility-based component of the OM survey documented issues related to the quality of services offered at the health center (CSB, or *Centre de Santé de Base*) level. This was examined in relation to the welcome at the site; the quality of the infrastructure; material and human resources available; and cleanliness and prevention of infections. In addition, questions on the knowledge of the staff were administered in some key areas, while in others, elements of the Tiahrt Amendment were incorporated to ensure compliance with USG regulations.

Health centers comply with key aspects related to the welcome of clients. Waiting areas are adequate (except for the provision of seating space); IEC sessions are offered while clients wait; and measures are taken that ensure minimum cleanliness in most regards. However, little is done to reduce wait time, to elicit and act on clients' opinions about the quality of the service, and to provide them with some basic amenities (like access to a toilet or latrine). Also, several issues related to prevention of infection are below expectations, seemingly due to a lack of proper equipment and disinfection supplies. Whereas key pieces of medical equipment are present (e.g., stethoscope), more specialized—but necessary—items, as well as visual aids, are lacking.

A recurring issue relates to the use of information to improve program performance. Local staff are expected to use monthly data and display it graphically to help decision-making, take action and monitor progress. Little of this is done in any of the health areas. In addition, too many sites did not follow the Ministry of Health's norms and protocols in some areas (e.g. IMCI and ANC). Finally, health centers did not pass the benchmark concerning the availability of qualified staff in the area of ANC.

Except for displaying clients' rights in FP, health centers complied with all provisions of the Tiahrt Amendment. This issue appears more related to the logistics of supplying all health centers with the visual aids they need, than to an avoidance of the policy.

Overall, recommendations are to improve the flow of activities in health centers. Those recommendations involve several levels of management, as appropriate, including commodity management systems, staff training and local program administration.

E1. GENERAL CONDITIONS

This section covers the information collected by the facility-based component of the OM Survey to examine the extent to which the health centers have the infrastructure, resources and supportive management required to ensure the provision and quality of key services. Aspects examined include:

- E1.1 Welcoming Services and Promotion of Client Satisfaction
- E1.2 Quality of the Infrastructure
- E1.3 Equipment, Drugs and Supplies Management
- E1.4 Cleanliness and Prevention of Infections

Main Conclusions and Recommendations: General Conditions

Health centers met performance benchmarks on: (i) welcoming clients by offering IEC sessions while they are waiting; (ii) displaying information on the services offered and providing an adequate space for clients to wait; and, (iii) having adequate examination rooms and proper storage areas for keeping drugs and medical supplies. Key drugs and equipment are usually present (including Depo Provera and DPT3, two key indicators for USAID/Madagascar); the sites are generally clean and apply minimum criteria for the prevention of infection; and the drug depots are managed adequately.

For health center performance to reach a 60% threshold on all indicators or standards, the USAID program should ensure that health centers:

- Provide sufficient seating spaces for clients while they wait
- Seek to reduce client wait time and elicit clients' opinions to improve services
- Improve access to toilets and equip them with amenities like a water point and a garbage bin
- Display information on the procedures used for decontamination, cleaning and sterilization of medical instruments and objects
- Provide the necessary training and equipment to ensure adequate decontamination, sterilization and storage of medical instruments and objects
- Provide the cleaning staff with adequate protective equipment

This list suggests that actions are needed by various levels of management: the commodity management system must ensure that necessary supplies and equipment (especially decontamination, sterilization and cleaning equipment) are available to all health centers; the staff training unit must reiterate the procedures to prevent infections at the site; the personnel in charge of health center infrastructure must provide adequate seating space for clients, and improve access to toilets and ensure they are equipped with the minimum amenities; and local staff must apply agreed-upon measures to reduce wait time and poll clients regularly to elicit their opinions on the provision of services. Those actions should help health centers reach satisfactory performance on established norms and standards at the general level.

E1.1 Welcoming Services and Promotion of Client Satisfaction

	Health Centers		Benchmark Met (Y/N)
	Total	Passed	
Offers IEC sessions while visitors are waiting	19	13	Y
Visibly displays information on			

1- Reproductive health	19	17	Y
2- Malaria	19	18	Y
3- IMCI	19	18	Y
Actively seeks to reduce waiting time			
1- Has a method to control and reduce waiting time	19	7	N
2- Applies this method at least twice a year	19	1	N
3- Uses the results to reduce patient waiting time	19	0	N
4- Maintains waiting time under 30m in normal time and 60m on crowded days	19	7	N
Seeks client opinions to improve services			
1- Elicit patients' opinions at least once in the last three months	19	5	N
2- Use these results to improve its services	19	3	N

E1.2 Quality of the Infrastructure

	Health Centers		Benchmark Met (Y/N)
	Total	Passed	
The waiting area			
1- Is adequately ventilated (or is outside)	19	19	Y
2- Is adequately lit (or is outside)	19	18	Y
3- Is protected from the sun and the rain	19	18	Y
4- Provides enough seating places	19	7	N
The toilet has			
1- A door that closes	19	16	Y
2- A water point	19	2	N
3- A garbage disposal bin	19	0	N
4- Is easy for clients to access	19	3	N
The examination room			
1- Ensures privacy	19	15	Y
2- Has an examination table	19	14	Y
3- Has a light source	19	19	Y
4- All of the above	19	11	Y
The health center has clean water available	19	10	Y

E1.3 Equipment, Drugs and Supplies Management

The following essential drugs and medications are present	Health Centers		Benchmark Met (Y/N)
	Total	Passed	
1- Depo-provera	19	17	Y
2- Condoms	19	17	Y
3- Ciprofloxacin	19	15	Y
4- Amoxicillin	19	16	Y
5- Doxycycline	19	11	Y
6- Erythromycin	19	14	Y
7- Metronidazole	19	17	Y
8- Cotrimoxazole	19	17	Y
9- Benzathine penicillin	19	14	Y

10- Nystatin	19	6	N
11- cura7	19	13	Y
12- Paracetamol	19	16	Y
13- SP tablets	19	14	Y
14- Mebendazole 500mg/Albendazole 400mg	19	7	N
15- FAF (tablets)	19	15	Y
16- physiological solution or Hartmann's solution	19	10	Y
17- Folic acid (tablets)	19	1	N
18- Benzathine Penicillin (injection)	19	12	Y
19- Isotonic glucose solution 5%	19	10	Y
20- Epicranial infusion pump	19	15	Y
21- Distilled water (injection)	19	16	Y
22- Tetanus vaccine	19	15	Y
23- Quinine (tablets, 300mg)	19	4	N
24- Quinine (injection, 600mg)	19	15	Y
25- Rapid diagnostic test for malaria	19	10	Y
26- Insecticide-treated bednet	19	2	N
27- Cotrimoxazole	19	9	Y
28- Chloroquine	19	16	Y
29- ORS packets	19	15	Y
30- Mebendazole (tablets 100mg)	19	14	Y
31- Vitamin A (gelules)	19	15	Y
32- Gentamicin (injection 20mg)	19	4	N
33- Metronidazole	19	17	Y
34- Ophthalmic ointment	19	12	Y
35- Gentian violet	19	10	Y
36- None of these medicines	19	17	y
The following essential equipment is present and in working condition			
1- An adult scale	19	18	Y
2- A container to decontaminate instruments	19	12	Y
3- A garbage can	19	18	Y
4- A box to dispose of sharp objects	19	18	Y
5- The necessary IEC materials	19	16	Y
6- A thermometer	19	16	Y
7- A stethoscope	19	18	Y
8- A serum support hanger	19	15	Y
9- A sterilizer	19	7	N
10- A drinking cup	19	12	Y
11- A basin for hand washing	19	17	Y
12- An infant scale	19	8	N
13- A child scale	19	9	Y
14- A spoon	19	10	Y
15- A clock or watch	19	13	Y
16- Bleach water or powder	19	2	N
17- A TRO corner with utensils	19	19	Y
18- Cotton balls/compresses	19	19	Y
19- Examination gloves	19	10	Y

20- Cleaning gloves	19	19	Y
21- Syringes for injectables	19	17	Y
22- Soap	19	7	N
23- Potable water	19	8	N
24- A kit for perfusion	19	9	Y
25- A naso-gastric probe	19	15	Y
26- IST inscription forms	19	1	N
27- Maternal health surveillance cards	19	14	Y
28- Newborn surveillance cards	19	13	Y
29- Maternal health card	19	11	Y
30- Child health card	19	12	Y
The drug depot is:			
- Clean	19	17	Y
- Dry	19	17	Y
- Ventilated	19	16	Y
- Protected against theft	19	17	Y
- Protected from the sun	19	17	Y
- Drugs are stored away from heat sources	19	16	Y
- Drugs are stored on shelves	19	5	N
1.3.6. The health center follows proper management practices for drug and medical supplies:			
1- Uses the FIFO system	19	10	Y
2- Does not keep items past their expiration date	19	12	Y
3- Notes movements daily in stock registry	19	15	Y
4- Documents unfulfilled demands (order slip, delivery slip, etc)	19	9	Y

E1.4 Cleanliness and Prevention of Infections			
	Health Centers		**Benchmark Met (Y/N)**
	Total	**Passed**	
The following spaces are clean (not soiled/dusty/dirty)			
1- Waiting room	19	16	Y
2- Consultation room	19	18	Y
3- Examination table	19	13	Y
4- Counters	19	5	N
5- Shelves	19	9	Y
6- Chairs	19	18	Y
7- Sink/bowl	19	9	Y
8- Toilets	19	9	Y
Medical waste and cutting objects are temporarily stored:			
1- In a location not accessible to clients	19	13	Y
2- In a container that is weather proof and closes well	19	11	Y
3- Cleanly so there is no waste outside the container	19	11	Y
4- Solid medical waste is incinerated or buried	19	14	Y
The health center displays instructions on practices to prevent infections			
1- On handwashing	19	19	Y
2- On decontamination	19	3	N
3- On cleaning	19	3	N

4- On sterilization	19	2	N
Instruments and other medical equipment are properly decontaminated			
1- Dipped in a chlorine concentration at 0.5	19	5	N
2- A new chlorine solution is prepared daily	19	4	N
3- Instruments are dipped a maximum of 10 minutes	19	5	N
When cleaning and disposing of waste, the staff uses protective equipment			
1- Cleaning gloves	19	0	N
2- Head cover	19	2	N
3- A mask	19	2	N
4- A bib or apron	19	5	N
5- Closed shoes	19	2	N
The health center sterilizes instruments adequately			
- Takes the clean instruments apart before sterilizing them	19	0	N
- Submerges instruments completely in water	19	3	N
- Covers the container	19	8	N
- Boils instruments for 20 minutes	19	9	Y
- Stores boiled instruments in a container with high level sterilization	19	4	N

E2. MATERNAL AND CHILD HEALTH

This section covers the information collected as part of the facility-based component of the OM Survey to examine the extent to which the health centers have the infrastructure, resources and supportive management required to ensure the provision of quality maternal and child health services and to effectively use local information in improving those services.

Expected services in maternal health include (i) antenatal care; (ii) ITP (intermittent preventive treatment for malaria[11]); (iii) obstetric emergencies; and (iv) orientation and response. Furthermore, health center staff are expected to provide education to pregnant women in safe pregnancy and delivery.

Services to be provided in the integrated management of childhood illness (IMCI) include the provision of education sessions to mothers on the management of childhood illnesses, the delivery of care on site for cases of child illnesses, and the provision of essential services such as immunization. In all those aspects, the health centers are expected to follow the Ministry of Health's norms and procedures. Performance in those various aspects is reviewed below.

Sections include:

- E2.1 Services Provided
- E2.2 Norms and Procedures in the Collection and Use of Information
- E2.3 Norms and Procedures in the Provision of IMCI Services
- E2.4 Staff Resources

Main Conclusions and Recommendations – MCh

ANC and PP Care

The survey showed a satisfactory performance in several aspects of ANC and PP care. The file management system uses a single form for maternal and perinatal conditions; and relevant information is noted legibly; information is correctly reported in the registry and monthly reports; minimum accommodations are used for record filing; and education is provided for safe pregnancy. However, many areas were found where improvements are required for the health centers to reach satisfactory levels of compliance with all of the Ministry's norms and standards in the provision of those services. To reach a satisfactory performance on all counts, the program should:

- Ensure that at least one staff at the health center is qualified to provide ANC services.
- Correctly file folders in scheduler to ensure proper follow up of clients.
- Ensure enough physical space exists to file client folders.
- Use the information collected locally to understand trends, take action and note those actions.

[11] In Madagascar, the TPI (Traitement Preventif Intermittent, ITP in English), consists in taking two doses each month of Sulfadoxine Pyrimethamine (SP) from the beginning of pregnancy to the 26th week. SP is a malaria prophylaxis locally known as Fansidar.

Child Health – IMCI

The program satisfactorily met several requirements associated with the provision of IMCI services: (i) health centers regularly offer education sessions to mothers in the management of childhood illnesses; (ii) IMCI information is collected using national norms; (iii) staff trained in IMCI is available and present; and (iv) a functional cold chain exists to ensure proper vaccination services. However, the survey showed low performance in some aspects, notably in terms of following Ministry's policies, norms and protocols on IMCI; and in terms of using information to improve the quality of services. To reach a satisfactory performance, the program should:

- Ensure that the Ministry's IMCI policies, norms and protocols are appropriately used and followed
- Train the staff in collecting and using information to improve the quality of services.
- Ensure the proper information is displayed on norms for vaccine storage; and that refrigerator units receive proper maintenance at least once every 12 months.

E2.1 Services Provided

	Health Centers		Benchmark Met (Y/N)
	Total	Passed	
ANC and PP Care			
Uses an adequate FPC file management system:			
1- file folders numerically in scheduler	19	0	N
2- single form for maternal and perinatal clinical condition	19	9	Y
3- noted relevant care information leg bly	19	13	Y
4- correctly filled clinical graph	19	3	N
Collect antenatal and post partum care information following national norms, including:			
1- individual record correctly filled	19	0	N
2- information correctly entered in registry	19	15	Y
3- information correctly entered in monthly report	19	16	Y
Analyze the antenatal and post partum care information collected for local decision making, including:			
1- display graphically two or more antenatal care results	19	0	N
2- take decisions based on those results	19	3	N
3- note those decisions	19	0	N
Provides education to pregnant women on health pregnancy:			
1- delivery preparation plan and preparation for complications	19	8	N
2- identification of danger signs and recommended actions	19	2	N
3- knowledge of risks prevention and treatment of malaria	19	4	N
4- voluntary counseling and testing (VCT) in HIV prevention of mother-to-child transmission (PMTCT)	19	4	N
5- STI	19	6	N
6- breastfeeding	19	2	N
7- family planning	19	6	N
8- SFP and vaccination schedules	19	7	N
9- importance of examinations during pregnancy	19	5	N
10- Any of the above	19	16	Y

Child Health - IMCI			
Offered education sessions to mothers during the last week on one topic related to the management of childhood illness (topics might include home treatment of infections, identification of danger signs and action needed, knowledge of risks, prevention and treatment of malaria; prevention and treatment of diarrhea, vaccination, nutrition)	19	11	Y
A complete and functional cold chain is present. The refrigerator:			
1- Is exclusively dedicated to vaccines	19	14	Y
2- Is in working condition	19	15	Y
3- Has energy source present	19	15	Y
4- Has a thermometer	19	10	Y
5- Has a temperature record card visibly displayed	19	16	Y
6- Has a temperature record card that is up to date	19	10	Y
7- Has a temperature record showing that temperatures stayed within normal brackets	19	11	Y
8- Is accompanied by an Immunization calendar that is visibly displayed	19	9	Y
9- Is accompanied by visibly displayed norms on vaccine storage	19	7	N
10- Has no stockout of DTP3 vaccine	19	16	Y
11- Received maintenance in the last 12 months	19	3	N
12- All of the above	19	6	N

E2.2 Norms and Procedures in the Collection and Use of Information			
	Health Centers		Benchmark Met (Y/N)
	Total	Passed	
ANC and PP Care			
Have adequate space for filing antenatal and post partum care patients folders, including:			
1- enough cabinets or shelves	19	0	N
2- can allow movement	19	11	Y
3- has place to sit	19	17	Y
Reports FPC using national norms:			
- Providing a consolidated monthly vaccination report	19	15	Y
Child Health - IMCI			
Collect IMCI information following national norms in monthly report form	19	11	Y
Analyze the IMCI information collected for local decision making, including:			
1- display graphically two or more antenatal care results	19	0	N
2- take decisions based on those results	19	2	N
3- note those decisions	19	0	N

E2.3 Norms and Procedures in Provision of IMCI Services			
	Health Centers		Benchmark Met (Y/N)
	Total	Passed	
Uses the national policies, norms and protocols for IMCI	19	5	N
Have an updated version of the IMCI standards, norms and protocols available	19	7	N

E2.4 Staff Resources			
	Health Centers		Benchmark Met (Y/N)
	Total	Passed	
ANC and PP Care			
Have qualified human resources for the provision of antenatal and post partum care services, including:			
1- physician	19	0	N
2- nurse	19	6	N
3- matron with state diploma	19	5	N
4- any of the above	19	7	N
Child Health - IMCI			
Have qualified human resources for the provision of IMCI services	19	11	Y

E3. FAMILY PLANNING (FP)

This section covers the information collected as part of the facility-based component of the OM Survey to examine the extent to which the USAID-supported health centers have the infrastructure, resources and supportive management required to ensure the quality delivery of key FP services that effectively promote the appropriate, efficient and continuous use of contraceptive methods.

Sections include:

- E3.1 Display of Information
- E3.2 Services Provided
- E3.3 Norms and Procedures in the Collection and Use of Information
- E3.4 Staff Resources
- E3.5 Supplies and Equipment
- E3.6 Tiahrt Amendment

Main Conclusions and Recommendations: Family Planning

FP services met performance benchmarks on: (i) displaying information on FP methods offered and on the schedule of services; (ii) providing key FP services; (iii) ensuring the presence of trained and knowledgeable service providers; (iv) ensuring the presence of essential FP supplies and equipment; and (v) most requirements of the Tiahrt Amendment. The data also point to a number of areas where improvements are needed so the health centers reach satisfactory levels of compliance with the Ministry's norms and standards in the provision of FP services, and with some of the provisions of the Tiahrt amendment. For health center performance to reach a 60% threshold on all indicators or standards, the program should:

- Display information on patients' rights, to be in compliance with the Tiahrt amendment
- Display graphically the level of activity on the various services provided
- Use the information collected locally to take action, and note these actions
- Conduct refresher training of staff so they can incorporate HIV as part of discussions with clients at their first FP consultation
- Ensure adequate supplies of condoms at health centers

This list indicates that action is needed at various levels: the commodity management system must improve its supply of condoms, and the provision of specific posters and visual aids to all health centers; the staff training unit must reiterate to service providers that they must discuss HIV during the first consultation; and, the local managers must ensure their staff is better motivated and/or trained in collecting and using clinical data for local decision-making. By directing the attention to those aspects, program managers will improve the capacity of health centers to reach satisfactory performance on established norms and standards.

E3.1 Display of Information

	Health Centers		Benchmark Met (Y/N)
	Total	Passed	
Display IEC information on family planning methods offered	19	10	Y
Display information on patients rights in the provision of FP services	19	4	N
Display IEC information on schedule of FP services	19	7	N

E3.2 Services Provided

	Health Centers		Benchmark Met (Y/N)
	Total	Passed	
Offer a complete minimum activity packet for the provision of FP services	19	8	N
1- information and counseling on family planning methods	19	15	Y
2- prescription of family planning methods	19	18	Y
3- regular follow up of FP services	19	17	Y
4- provides referral to health facility	19	10	Y

E3.3 Norms and Procedures in the Collection and Use of Information

	Health Centers		Benchmark Met (Y/N)
	Total	Passed	
Have an adequate FP file management system, where patient data is noted legibly and correctly	19	18	Y
Collect information on the provision of FP services using national norms, including:			
1- individual record correctly filled	19	17	Y
2- monthly report form correctly filled	19	16	Y
Analyze the FP information collected for local decision-making, including:			
1- display graphically two or more FP results	19	0	N
2- take decisions based on those results	19	4	N
3- note those decisions	19	0	N

E3.4 Staff Resources

	Health Centers		Benchmark Met (Y/N)
	Total	Passed	
Have qualified human resources for the provision of FP services	19	16	Y
Staff correctly lists steps to do at the first FP consultation, including:			
1- identify clients needs	19	16	Y
2- explain choice of methods	19	17	Y
3- verify client is not pregnant	19	12	Y
4- discuss method favored by client	19	14	Y
5- provide counseling on protection from HIV	19	0	N
Staff states not having been offered rewards for promoting a particular FP method or product	19	18	Y
Staff states not having been offered rewards for promoting FP in general	19	18	Y

E3.5 Supplies and Equipment			
	Health Centers		Benchmark Met (Y/N)
	Total	Passed	
Have all the required equipment for FP education:			
1- anatomic models for male condoms	19	9	Y
2- display showing FP methods	19	13	Y
Have an updated copy of FP guidance, standards and protocols	19	8	N
Have the necessary FP stocks, including:			
1- Depo Provera	19	17	Y
2- condoms	19	17	Y
3- needles and syringes for injection	19	17	Y

E3.6 Tiahrt Amendment

The Tiahrt amendment, passed by the U.S. Congress in 1998, prohibits funding any organization or program that supports or participates in coercive abortion or involuntary sterilization. Further, no quotas or incentives for FP can be incorporated into projects receiving U.S. funding. The amendment also requires that client options be respected when introducing and providing FP services. Questions were introduced in this survey to ensure the basic provisions of the Tiahrt amendment are observed in USAID-funded FP programs.[12]

To ensure that FP clients have freedom of choice in selecting their preferred FP method, the OM Survey verified whether the health center visibly displayed information on all methods available and on patients rights in relation to FP, had the various methods available at hand, and had a display of FP methods for clients' perusal. As already mentioned above, information was adequately displayed on the methods available, but an insufficient number of sites were found to display patients' rights. With respect to the availability of services and supplies, the subsections above clarified that key services and supplies were indeed present in satisfactory number across health centers, except for condoms, which were in stock in less than the desired number of health centers.

To ensure that no quotas or incentives are applied, questions were included to verify whether health center staff were under any pressure, or were offered any incentives to promote FP in general or a specific method in particular. Based on the staff's answers to those questions, the survey found no evidence that a system of quotas was applied, or that incentives were offered to promote either FP in general, or a FP method in particular.

The health centers were found to comply in most regards with the provisions of the Tiahrt amendment. Two elements appear to require further effort in order to ensure full compliance with the terms of this amendment. These are to visibly display patient's rights on their use of FP services, and ensure that condoms are available, so that clients can truly exert their freedom of choice in selecting their preferred FP method.

[12] No specific questions were included about coercive abortion or involuntary sterilization, as health centers are part of the Ministry of Health, which does not support such actions.

E4. HIV AND STIS

This section covers the information collected by the facility-based component of the OM Survey to examine the extent to which the health centers have the infrastructure, resources and supportive management required to ensure the provision and quality of key STI and HIV services. Services to be provided include education sessions to reduce the risk of STI and HIV, specific actions for vulnerable groups, and the treatment of STI patients using the syndromic approach. In all these aspects, health centers are expected to follow the Ministry of Health's norms and procedures and to effectively use local information in improving those services. Performance in those various aspects is reviewed below.

Sections include:

- E4.1 Services Provided
- E4.2 Norms and Procedures in the Collection and Use of Information
- E4.3 Norms and Procedures in the Provision of HIV/STI Services
- E4.4 Staff Resources

Main Conclusions and Recommendations: HIV and STIs

The results suggest that health centers perform satisfactorily on all aspects considered, including the package of STI and HIV services provided, the use of standard norms and procedures in the collection of information, and the knowledge of staff concerning key steps during STI consultation. Health centers therefore reach satisfactory levels of compliance with the Ministry's norms and standards in the provision of STI and HIV services.

E4.1 Services Provided

	Health Centers		Benchmark Met (Y/N)
	Total	Passed	
Offer a complete minimum activity packet for STI and HIV prevention and control			
1- IEC messages to reduce risk of STI and HIV	19	15	Y
2- specific actions for vulnerable groups	19	19	Y

E4.2 Norms and Procedures in the Collection and Use of Information

	Health Centers		Benchmark Met (Y/N)
	Total	Passed	
Have an adequate STI file management system where patient data is noted completely and legibly	19	9	Y

E4.3 Norms and Procedures in the Provision of HIV/STI Services			
	Health Centers		Benchmark Met (Y/N)
	Total	Passed	
Have protocols and IEC support for treatment of STI	19	18	Y

E4.4 Staff Resources			
	Health Centers		Benchmark Met (Y/N)
	Total	Passed	
Have qualified human resources for the provision of STI and HIV services, including:			
1- staff trained in HIV/AIDS counseling	19	19	Y
2- staff trained in syndromic approach for the treatment of STI	19	9	Y
Staff lists correctly at least 5 of the 6 steps to do at the STI consultation, including:			
1- proceed with interview	19	0	N
2- establish risk profile	19	7	N
3- do examination	19	13	Y
4- choose appropriate protocol	19	12	Y
5- decide treatment	19	17	Y
6- inform that sexual partner be notified	19	14	Y

ANNEXES ON CD-ROM

The following Annexes are contained on the accompanying CD-Rom:

Annex 1: List of sites visited
Annex 2: List of indicators collected
Annex 3: Population survey questionnaire
Annex 4: Health Center survey questionnaire
Annex 5: Field Manual
Annex 6: SPSS syntax for data transformation
Annex 7: Scope of Work and Terms of Reference for Local Firm Contract
Annex 8: Olives, Casey 2006.
Annex 9: Pocket PC Creations Population Survey Application software
Annex 10: Pocket PC Creations Health Center Survey Application software
Annex 11: Full Population survey dataset
Annex 12: Full Health Center survey dataset