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ASSESSMENT OF USAID/BASICS' COMMUNITY ESSENTIAL NUTRITION ACTIONS PROGRAM IN MALAWI



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TABLE OF CONTENTS

ACKNOWLEDGEMENTS	iii
ACRONYMS	iv
EXECUTIVE SUMMARY	vi
INTRODUCTION	1
DESCRIPTION OF THE COMMUNITY ENA PROGRAM	2
Description of the Program.....	2
Coverage and Scale of the Program.....	3
THE ASSESSMENT	6
Objectives	6
Methodology.....	6
FINDINGS OF THE ASSESSMENT AND DISCUSSION	9
Impact on Nutritional Status – MUAC and growth chart patterns.....	9
Assessment of Health and Nutrition Outcomes and Related Outputs.....	11
Impact on Male Involvement	17
Assessment of Program Inputs and Processes	19
Attitudes and Perceptions about the Program.....	36
CONCLUSIONS	46
RECOMMENDATIONS	50
ANNEXES	53
Annex 1—List of Participants in the Assessment of the Community Essential Nutrition Actions Program, Malawi	49
Annex 2—Monitoring Indicators Reported Monthly to HSAs Per Village by Facilitators in Community ENA Program in Malawi.....	51

LIST OF TABLES

Table 1—Coverage of Community ENA Program in Phalombe District, Malawi as of July 2009.....	4
Table 2 —Coverage of Community ENA Program in Zomba District, Malawi as of July 2009.....	5
Table 3 —Assessment Sample Size and Selection.....	7
Table 4 —Characteristics of Program and Control Communities.....	8
Table 5 —Child’s Health passport, Growth Trends, and Mid-Upper Arm Circumference.....	10
Table 6—Child’s Immunization Status.....	12
Table 7—Women’s Use of Antenatal Care and Institutional Delivery Services.....	13
Table 8—Home Visits by health Workers or Facilitators per Mothers’ Responses.....	14
Table 9—Facilitators’ Nutrition Counseling Skills during Home Visits.....	15
Table 10—Husband’s Involvement in Assisting his Wife during Pregnancy and After Delivery.....	18
Table 11—Mothers’ Suggestions for Improving Growth Monitoring and Promotion.....	31

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ACRONYMS

>	Greater	than
> =		Greater than or equal to
<	Less	than
< =		Less than or equal to
ACDS		Accelerated Child Survival and Development Strategy
AIDS	Acquired	Immune Deficiency Syndrome
ANC	Antenatal	Care
ART	Anti-Retroviral	Therapy
BASICS		Basic Support for Institutionalizing Child Survival
BCC	Behavior	Change Communication
BCG	Tuberculosis	Immunization
CAS	CTC	Advisory Services
CHAM		Christian Health Association of Malawi
CTC	Community-based	Therapeutic Care
DC	District	of Columbia
DEHO	District	Environmental Health Officer
DHMT	District	Health Management Team
DHO		District Health Officer /District Health Office
DIP	District	Implementation Plan
DNO	District	Nursing Officer
DPT	Diphtheria,	Pertussis, Tetanus Immunization
EDD	Expected	Date of Delivery
ENA	Essential	Nutrition Actions
FANTA		Food and Nutrition Technical Assistance Project
FGD	Focus	Group Discussion
GMP	Growth	Monitoring and Promotion
GVH	Group	Village Head(wo)man
HC	Health	Center
HI	High	Impact
Hep B	Hepatitis	B Immunization
Hib		<i>Haemophilus influenzae</i> type b Immunization
HIV	Human	Immunodeficiency Virus
HSA	Health	Surveillance Assistant
HTC	HIV	Testing and Counseling
ICDS		Integrated Child Development Services Scheme
IYCF	Infant	and Young Child Feeding
LMP	Last	Menstrual Period
MCH	Maternal	and Child Health
MICS	Multiple	Indicator Cluster Survey
MOH	Ministry	of Health
MFSG	Mother	Father Support Group
MUAC	Mid-Upper	Arm Circumference
N	Number,	Sample Size
NGO	Non-govern	mental Organization
NS	Not	Significant
PMTCT		Prevention of Mother –to- Child Transmission
RH	Reproductive	Health
SAM	Severe	Acute Malnutrition
SD	Standard	Deviation

SP	Sulfadoxine/Pyrimethamine	mine for malaria
SPSS		Statistical Package for the Social Sciences
TA	Traditional	Authority
TB	Tuberculosis	
TBA	Traditional	Birth Attendant
TIP	Trials	of Improved Practices
TOT	Training	of Trainers
UNICEF		United Nations Children's Fund
USAID		United States Agency for International Development
VCT		Voluntary Counseling and Testing for HIV
WHO	World	Health Organization

EXECUTIVE SUMMARY

Malnutrition in Malawi and the Community Essential Nutrition Actions Program

The prevalence of chronic malnutrition or stunting in Malawi is among the highest in the world, with around half of all children under five suffering from low height for age. Interventions to prevent this often irreversible stunting are most effective during the critical time period of rapid growth and child development from pregnancy through the first two years of life. However, more attention has been paid in recent years in Malawi to the treatment of severe acute malnutrition, leading to the neglect of community-based programs to prevent malnutrition. To address this imbalance and demonstrate an effective preventive approach, USAID/BASICS introduced the Community Essential Nutrition Actions Program in 31 villages in the districts of Phalombe and Zomba in southern Malawi starting in 2008. Through community-based volunteer facilitators, growth promotion and better links to health services, the program is tackling the root causes of the high rates of malnutrition so early in life. These are women's inadequate diet/rest to meet the increased demands of pregnancy and lactation, and children's growth faltering due to sub-optimal feeding practices and infections. The main intervention is growth promotion through cooking demonstrations, counseling and home visits, to change feeding behaviors and increase use of health services. Ministry of Health (MOH) Health Surveillance Assistants (HSA) supervise the facilitators, conduct monthly multi-village outreach clinics for children under five years with growth monitoring and promotion and immunization, and provide community case management for illness and a link for referrals to facility-based health services. A major push has been increasing the involvement of husbands/fathers in maternal and child health and nutrition, as programs that leave men out and focus just on mothers have been less successful.

The seven **Essential Nutrition Actions (ENA)** of the Malawi Ministry of Health's (MOH) national nutrition policy are: 1) Improving women's nutrition, 2) Optimal breastfeeding in the context of HIV and AIDS, 3) Optimal complementary feeding, 4) Feeding a sick child during and after illness, and micronutrient interventions, namely 5) Control of iodine deficiency disorders, 6) Control of anemia, and 7) Control of Vitamin A deficiency. The USAID/BASICS Community ENA program is directed mainly at the first four of these. Micronutrient deficiencies are addressed in the program through promoting improvements in the diet, and indirectly through advocacy to assure adequate supplies and universal coverage of Vitamin A and iron/folic acid supplementation programs.

Overview of Assessment Methodology and Sample

This report presents the findings and recommendations of an assessment carried out in Malawi in July 2009 which reviewed the performance of the USAID/BASICS Community ENA Program to date and advised on strengthening and expanding the program over the next two years. The objectives of the assessment were to determine: 1) program impact on a) growth trends and nutritional status, b) use of health and nutrition services, and c) male involvement; 2) role of the HSA and whether the program has assisted them with their nutrition responsibilities, and 3) if there are gaps in the quality of program processes and inputs and how to address them. The assessment also served as a baseline survey for future work on the program; no such data were collected previously.

A mix of qualitative methods (key informant in-depth interviews, observations of outreach clinics, home visits and mother father support group meetings, and focus group discussions), and quantitative measurement of program impact through interviews in program and control villages were used. Every program village in both districts was visited

and included in the review sample for applying one or more of the eleven instruments. The assessment reviewed performance at each level of the program, namely beneficiary mothers, fathers, and children, facilitators, village headmen or women, health surveillance assistants and health center staff, the District Health Management Team (DHMT) and BASICS District Office and Lilongwe staff. A total of 456 people were interviewed and mid-upper arm circumference measured in 121 children under two years in the program villages and 119 children under two years in the control villages. The sample of villages and people interviewed was drawn randomly, except for interviews with district officials, purposively selected given their responsibility for the program.

There were 21 interviewers: 14 on loan from MOH, four from the private sector, and three from BASICS/Malawi staff. The Nutrition Technical Officer from BASICS headquarters in Washington, DC led the assessment, along with the BASICS/Malawi Community Health and Nutrition Advisor who is the program officer for Community ENA. Two data entry clerks and one data analyst also worked on the review. Quantitative data were analyzed using the Statistical Package for the Social Sciences (SPSS) software. Interviewers were trained for two days. Changes were made to the instruments based on interviewers' suggestions during the training and after the pre-test. All interviewers were fluent in the local language, Chichewa. The interviews and focus groups were done in Chichewa. Field work was carried out from July 20-27, 2009.

Program Coverage

As of July 2009, the program covered 31 villages in Phalombe and Zomba districts through 261 trained volunteer facilitators serving 4,981 households and 1,617 children less than two years of age, as well as pregnant and lactating women. The number of children under two years served by each facilitator is very low- only six to seven children. This is an inefficient coverage ratio compared to similar programs elsewhere where community volunteers each cover four to thirteen times as many children. The number of households in the village was the unit for determining how many facilitators to have, instead of doing the customary census to identify and count the total target population and using that information to decide on the number of facilitators.

Program Design Concept

The program's strategy of having volunteer facilitators make frequent behavior change contacts in the community for improving maternal nutrition, infant and young child feeding, male involvement, and use of health services is a good one. Such volunteer promoters are necessary because the HSAs alone cannot do this work at the intensity required, given their other duties. Through teamwork between the volunteer facilitators and the HSAs, the program has both responded to the lack of community-based malnutrition prevention efforts, and strengthened the interface between the community and facility-based health services. However, the HSA's role in the program is not well defined. Having facilitators to help them in some cases resulted in HSAs delegating nutritional responsibilities that are and should remain in their job description.

Though the program has also been called the Mother Father Support Group Program, traditional support groups who offer peer-to-peer mutual assistance around shared problems have not been established. Instead, the program use conventional nutrition and health education methods, such as talks and cooking demonstrations by facilitators, and counseling during home visits and monthly growth monitoring and promotion sessions. The assessment team found the latter approach more appropriate. Given the wide array of behaviors addressed across the continuum from pregnancy through the first two years

of life and the seven essential nutrition actions, the support group approach, which to succeed requires membership of similar people who share the same problem/challenge, is not a good fit. In contrast such support groups have been effective elsewhere for the small sub-group of HIV positive mothers to address their special infant feeding needs and prevent mother-to-child transmission. If the Community ENA Program works more with HIV positive mothers in the future, support groups could be appropriate for them.

Impact in Program versus Control Communities

- *Nutritional status* - The program has not had an impact on improving children's nutritional status or growth trends. This is not surprising given that gaps were found in a number of components necessary for a successful growth monitoring and promotion program. Furthermore, the program had been underway for less than a year in a number of the communities, and that is too short a period to expect major improvements in nutritional status. The most significant nutritional problem found was the failure of one third of children from 6-24 months of age to gain adequate weight (growth faltering).
- *Use of health services* - There is a trend toward increased early attendance at antenatal care in the program villages, though this is not statistically significant. No impact was found on increasing institutional deliveries or immunization coverage.
- *Home visits* -The program has dramatically increased the frequency of home visits through having volunteer facilitators in the villages, with 69% of mothers in program villages reporting receiving a home visit by a health worker or facilitator in the past three months, compared to only 23% in control villages.
- *Male involvement* - There has been a significant increase in men's involvement assisting their wives to reduce workload in pregnancy and lactation. Women in the program villages reported that 39% of their husbands did this, versus only 23% of husbands in the control villages.
- *Positive perceptions* – The program is popular at all levels. It has achieved community mobilization and local ownership. Village chiefs are actively involved.

Growth Monitoring and Promotion and Behavior Change

- Mobile outreach clinics for under fives are where growth monitoring and promotion are done monthly by HSAs according to MOH norms. Volunteers/facilitators help with weighing at these clinics. Attendance by mothers with children less than two years of age is high, with immunization services being a big draw. However, there is little diagnosis of inadequate weight gain or effective nutrition counseling. The USAID/BASICS program has not worked to improve the nutritional outcomes of the outreach clinics. These clinics represent a huge missed opportunity for successful encounters with mothers, fathers and caregivers to prevent malnutrition and to work on improving feeding behaviors.
- Weighing sessions done by facilitators in the village appeared to be an unnecessary duplication of effort of those done at outreach clinics. These attracted children two to five years of age who are not the priority group for nutritional risk, in addition to the priority group of children under two years, causing extra work for the facilitators.
- Regular monthly attendance at outreach clinics for weighing 77% of the time by mothers and children under two years in control villages was slightly higher (though not significantly so), than the 72% attendance in program villages, where facilitators also did weighing in the village. The high attendance, even without intervention, is an asset, and makes it realistic to strive to achieve the benchmark of 80% attendance.
- Counseling skills of HSAs and facilitators to advise mothers on improved feeding practices and address possible infections (including HIV/AIDS) were weak. The absence of counseling materials or job aides for this purpose made effective counseling more challenging. The program has focused more on improving breastfeeding practices than on improving complementary feeding practices, whereas the latter is the bigger need.
- Review of growth charts of a few facilitators' children in the 6-24 months age group, revealed that these children were also suffering from growth faltering and that these facilitators had not yet succeeded in improving their feeding practices to achieve adequate growth in their children. Until the facilitators successfully model the recommended behaviors, it will be difficult for them to convince others.
- Mothers, facilitators, and HSAs are not clear on the “why” and “how” of measuring and monitoring adequate weight gain. The child’s weight gain status for the current month is not used as a starting point to counsel mothers or prioritize home visits. Nearly all children were considered “normal” and not “underweight”, despite the fact that the growth charts of one third of the children from 6-23 months indicated inadequate weight gain. Workers’ weighing, plotting and interpretation skills need strengthening.
- Too few weighing scales to cover all villages, and stock outs of health passports in both districts are obstacles to successful growth monitoring and promotion. Nearly one third of children less than two did not have health passports.

Micronutrient Interventions

The three micronutrient essential nutrition actions (control of deficiencies of iodine, Vitamin A, and anemia) are minimally addressed by the program through general advice on dietary improvement, diversification, and consuming the six food groups. Because of stock-outs, the health facilities and outreach clinics were not providing supplementation with iron/folic acid to pregnant women, Vitamin A to postpartum women, and Vitamin A every six months to children 6-24 months of age.

Supervision and Program Management

Supportive supervision and in-service training of facilitators by HSAs need to be improved. However, program managers should seriously review if this is feasible given the HSA's many responsibilities and workload. Facilitators want more feedback on their work. Regular program review meetings of BASICS staff with the DHMT are needed.

Monitoring and Evaluation

- More emphasis is needed on managing for results. The recently introduced program monitoring and evaluation system is weak and focused on numerical output indicators (not percentages). Weight gain indicators with numerators and denominators are not used, making it impossible to evaluate results or measure worker performance.
- There are major limitations with both the design and manner in which the HSAs complete the MOH's registers for Under One Children Register and Under Five Children, used nationally by health centers, in terms of correctly classifying children with inadequate weight gain to catch and prevent malnutrition early, serially tracking children's weight gain in repeat visits, and using this information to attend children at-risk and do follow-up through home visits and attention at the next month's clinic.
- Improved facilitator's registers are needed, which include weight gain indicators and address, in the short-term, some of the limitations of the health center's registers by recording sufficient information to guide attention and follow-up for children at nutritional risk.

Summary of Recommendations

Overall strategic approach: Program implementation over the next two years should focus on activities to truly improve maternal, infant and young child feeding practices, child growth and nutritional status of under twos. Two components are recommended, with growth promotion and counseling as the core strategy. The first component will build on the presence of the existing facilitators in 31 demonstration program villages, and strengthen their work as persuasive behavior change counselors. The second component will seize the great missed opportunity of existing village outreach clinics, and transform the rote growth monitoring done there into quality growth promotion and effective counseling. The result will be successful monthly preventive nutrition encounters for thousands of mothers and children. Improving the quality of the preventive nutrition work done by HSAs and volunteers at the outreach clinics and during community level follow-up appears to be the most realistic strategy for scaling up the program. These high coverage clinics are part of the existing MOH infrastructure. Once the program demonstrates this successful approach to improve growth promotion and counseling, it should steadily expand to introduce these improvements to HSAs and volunteers at additional outreach clinics and villages to achieve large scale coverage.

Short-Term, August 2009- March 2010: Systems Strengthening Phase in 31 Pilot Villages

The following recommendations describe the systems strengthening measures required to make the program fully effective. The demonstration project should run with these improvements in place for several months before it is reviewed again to determine whether it is an effective growth promotion model that should be expanded.

Highest Priority (most urgent):

1. Strengthen Community-based Growth Monitoring and Promotion (GMP) by HSAs and facilitators at outreach clinics and in home visits as follows:
 - a. Provide weighing scales to all 31 program villages. Advocate to district and health center officials to resolve stock outs of health passports/growth charts.
 - b. Design and print counseling materials for improving maternal and infant and young child feeding practices for use by facilitators and HSAs. Short-term external technical assistance needed.
 - c. Design Monitoring and Evaluation System (revise facilitators' registers and reports by facilitators and HSAs) with the following key indicators for children under two years of age reported monthly: i) percent of registered children weighed, ii) percent of children that gained weight, iii) percent of children that did not gain weight, iv) percent of children that did not gain weight for two consecutive months.
 - d. Orient stakeholders to get their input on the design of proposed new tools and approaches.
 - e. Provide in-service, on-site refresher training to all program facilitators and HSAs on using the new tools and approaches to strengthen the program.
2. Identify and put in place short-term external technical assistance by one consultant to provide continuous support over the next two years.
3. Collect inventory and schedule of existing outreach clinics and volunteers that assist HSAs with growth monitoring in Phalombe and Zomba to identify potential sites and facilitators for an expansion phase.

Medium Priority:

1. Introduce a planning tool based on nutritional risk to prioritize Home Visits by facilitators and HSAs.
2. Strengthen the System for Referrals of patients to health facilities by facilitators to ensure that referred patients receive quality care. Orient health center staff.
3. Design and introduce supportive supervision by HSAs of the nutrition work of facilitators and of HSAs by the District Health Office. This includes regular sector meetings at which in-service training can be provided.
4. Advocate with MOH and UNICEF to eliminate stock outs of Vitamin A and iron/folic acid supplements.

5. Implement program with all of the above improvements through March 2010.
6. In March 2010, review results of implementation of program improvements. If the program is able to demonstrate impact on children's weight gain, plan scale up to additional outreach clinics and villages in Phalombe and Zomba districts. Short-term external technical assistance needed.

Long-term Expansion Phase in Phalombe and Zomba (April 2010-June 2011)

1. Revise Community ENA Training Manual for HSAs and Facilitator's Guide to include new tools and changes to the program. Take most of the content from existing HSA and other training manuals. Print and distribute.
2. Train new facilitators and HSAs to expand program to additional villages and outreach clinics. Do census of the target population and assign facilitators to each cover at least 25 children less than two years of age.
3. Establish maternal and infant and young child nutrition counseling corners in additional health centers.
4. Use follow-up of all mother-infant pairs across the continuum from pregnancy through two years of age, occurring through growth promotion sessions and home visits, to better address the special needs of HIV positive mothers and exposed infants for infant feeding advice and prevention of mother-to-infant transmission.
5. Improve the registers (Under One and Under 5 Children) used by health centers and HSAs to focus on tracking weight gain of children under two years, follow-up and home visits to children at nutritional risk.
6. Carry out policy dialogue with MOH authorities at the central level to persuade them to change the norm of weighing all children under five years of age at outreach clinics, to a more efficient and better targeted norm of just weighing children under two years of age.

General Recommendations (less urgent)

1. Strengthen coordination with and involvement of non-health sectors, and foster partnerships with other stakeholders present in the program communities.
2. Use drama, songs, dance, poems, or a newsletter to mobilize communities.
3. Launch additional innovative methods to increase male involvement.

I INTRODUCTION

Malnutrition in Malawi is a serious development and health problem, particularly for children under five years of age, pregnant and lactating women, and people living with HIV/AIDS. According to the Malawi Multiple Indicator Cluster Survey (MICS) 2006 the country has one of the highest stunting rates in Africa and in the world; 46% of children under five years of age are stunted (low height for age). The survey also documented that 19% are under weight (low weight for age) and 3% suffer from acute malnutrition or wasting (low weight for height). Moderate and severe malnutrition are the underlying cause of 34% of under five deaths in Malawi.¹

Inappropriate infant and young child feeding practices are major determinants of undernutrition so early in life. As in other developing countries around the world the MICS found that most of the deterioration in nutritional status occurred in the first two years of life. This failure to grow normally is related to factors such as early introduction of complementary foods before six months and failure to practice exclusive breastfeeding during that period. The MICS found that only 58% of infants less than six months were exclusively breastfed in Southern Malawi. Even more deleterious to normal weight gain are the poor quality and quantity of complementary foods and infrequent feeding. Children also lose weight due to repeated infections, such as diarrhea, malaria, and HIV/AIDS.

Droughts and external economic shocks to the country in recent years have exacerbated the problem of acute malnutrition. In response, community-based therapeutic care (CTC) programs with ready- to-use therapeutic foods have become a major focus for treating severe acute malnutrition. However, with the emphasis shifting heavily towards treatment and expanding CTC on a routine, non-emergency basis, less attention has been paid to strengthening prevention programs in the community, such as essential nutrition actions (ENA) and growth monitoring and promotion (GMP).

As part of its Task Order Number 6 with BASICS, USAID/Malawi has requested BASICS to implement an improved preventive nutrition program at community level (Component B). Therefore, BASICS/Malawi has launched a pilot project in 31 villages in the districts of Phalombe and Zomba in Southern Malawi to demonstrate an effective approach to preventing malnutrition in pregnant and lactating women and children under two years. The plan is to expand the program in Phalombe and Zomba districts, if it proves effective and scalable. The program is known as Community Essential Nutrition Actions (ENA). The selected districts have high malnutrition rates, with a prevalence of childhood stunting of 47% in Phalombe and 51% in Zomba per the MICS 2006. The program emphasizes improving maternal, infant and young child feeding practices through growth monitoring and promotion activities in the community, including counseling and home visits. These activities are carried out primarily by volunteer facilitators who are to establish Mother Father Support Groups (MFSG). The USAID/BASICS Community ENA program began in April 2008.

This report presents the findings and recommendations of an assessment carried out in July 2009 to review the performance of the program to date and to guide decisions on strengthening and expanding the program over the next two years. The assessment also served as a baseline survey for future work on the program since no such data had been collected previously.

¹ Nutrition of Young Children and Mothers, Malawi 2004. Africa Nutrition Chartbooks. Based on the 2004 Malawi Demographic and Health Survey. ORC Macro, USAID and the Malawi Ministry of Health. Because of its extensive prevalence, moderate malnutrition contributes to 30% of under- five mortality, whereas severe malnutrition contributes to only 4% of deaths of children under five years.

II. DESCRIPTION OF THE COMMUNITY ENA PROGRAM

A. Description of the Program

Goal of Program: To improve nutritional status of women of child bearing age, infants and young children through a preventive High Impact Essential Nutrition Action (ENA) Strategy in the context of Maternal and Child Health (MCH)/Family Planning, Accelerated Child Survival and Development Strategy (ACDS), and HIV/AIDS.

Support Group Definition:

The USAID/BASICS Trainer's Manual for the Malawi program defines an MFSG as follows:

"This is a group of family members in a defined household catchment area headed by the community MFSG facilitator to promote family-centered care approach including male involvement in health and nutrition practices focusing on pregnant women, mothers with infants and young children, caregivers of orphaned children and families living with HIV infection and AIDS. The household members with their spouses meet regularly under the guidance of the assigned MFSG facilitator to:

- Share experiences in Maternal and Child Health, Reproductive Health, and key caring practices
- Conduct cooking and other nutrition demonstrations for infants and young children, and discuss issues of household food security and other food and nutrition topics
- Get help from experienced members
- Support each other in HIV, Preventing Mother-to-Child Transmission (PMTCT), and other issues
- Assess each others' and their children's health

Goal of MFSGs:

Taken from the USAID/BASICS Trainer's Manual for the Malawi program:

"To empower the community in knowledge and skills to enable them to take necessary action in their own homes, and support neighbors to promote child and maternal nutrition, prevent malnutrition and to practice reproductive health behaviors that support child care and improve maternal health."

Intervention: Community MFSGs are to be established by a trained volunteer facilitator. Facilitators cover a village sub-division or "mbumba" or "section commander" of around 18-20 households. These facilitators implement ENA in the community through meetings for health talks and cooking demonstrations, monthly growth monitoring and promotion sessions and home visits. The objectives are to promote optimal maternal, neonatal and child health and nutrition practices and change behavior. Ministry of Health (MOH) Health Surveillance Assistants (HSA – the lowest level paid health worker) supervise the facilitators, conduct monthly multi-village outreach clinics for children under five years with growth monitoring and promotion, and provide community case management for illness and a link for referrals to facility-based services. Communities are mobilized for nutrition education, collective action to prevent or reduce malnutrition, and case-finding. A cross-cutting theme is to increase male involvement, including choosing men as half of all facilitators.

Essential Nutrition Actions: The Malawi Ministry of Health's national nutrition policy focuses on seven Essential Nutrition Actions, namely: 1) Improving women's nutrition, 2) Optimal breastfeeding in the context of HIV and AIDS, 3) Optimal complementary feeding, 4) Feeding a sick child during and after illness, and micronutrient interventions, namely 5) Control of iodine deficiency disorders, 6) Control of anemia, and 7) Control of Vitamin A deficiency. The USAID/BASICS Community ENA program in Malawi is directed primarily at the first four of these. Micronutrient deficiencies are addressed in the program through promoting improvements in the diet, and indirectly through advocacy to assure adequate supplies and universal coverage of Vitamin A and iron/folic acid supplementation programs.

B. Coverage and Scale of the Program

The coverage of the program as of July 2009 in 31 villages in Phalombe and Zomba Districts can be seen in **Tables 1 and 2**. There are a total of 261 facilitators serving 4,981 households and 1,617 children under two years of age. Thus, each facilitator is covering an average of 19 households and six children less than two years of age. In interviews with fifteen facilitators during the assessment, they reported each covering an average of fifteen households and 67 people in those households (or 4.5 members per household). In terms of the target population, the facilitators reported covering seven children under two years, one pregnant woman and one postnatal woman each. The total population covered by the program can be estimated by multiplying the 4,981 households times 4.5 members for a total of 22,415 people served across both districts. In turn, the 1,617 children under two years of age in the program area represent approximately 7% of the total population.

The very small ratio of the target population covered by each facilitator results from the fact that the number of households in the village was used as the unit for deciding how many facilitators were needed, i.e. one facilitator for eighteen to twenty households. However, many households do not have members of the target group, namely children less than two years, and pregnant and lactating women. The assessment found that this low coverage by each facilitator is not efficient or sustainable. Many facilitators covering very few people increase the cost of the program for training, supervision and supplies. This is in contrast to the best practice in similar community nutrition volunteer programs in other countries of first doing a census of the community to count the target population, then basing the number of volunteers on a ratio of at least 25 target population covered by each volunteer. For example, in the very large national Integrated Child Development Services (ICDS) nutrition program in India, one village volunteer covers 70-80 target population (13 times the number of people covered by each facilitator in the Community ENA Program). At that ratio, the entire estimated population of Phalombe District of 322,409 people could be covered by twice the number of existing facilitators (177).

Another drawback to the low numbers of target population covered by each facilitator is that the facilitator cannot organize support group meetings or health talks with homogeneous groups of enough mothers or fathers who are currently at the same stage along the pregnancy, breastfeeding, complementary feeding continuum, and, thus, have common interests and needs. Such homogeneous groups, in which participants share common problems, are much more effective for nutrition and health education and peer-to-peer support, than heterogeneous groups with mixed interests for which nutrition and health education needs to remain very broad to address everyone's diverse interests.

Table 1: Coverage of Community ENA Program in Phalombe District, Malawi as of July 2009

District /TA Name: Phalombe	No.	Village Name	Number of Facilitators as of July 2009		Number of Beneficiaries:		Date Program Started	Name of Health Surveillance Assistant's (HSA) Health Facility or Health Center (HC)
			Female	Male	# Households	# < 2 Years		
								Holy Family Hospital (HFH)
TA Mkumba:	1	Nyambalo	5	4	238	74	April 08	HFH
	2	Phunduma	7	5	217	43	July 08	HFH
	3	Makolera	7	4	150	32	July 08	HFH
	4	Milambo	6	4	65	21	Aug. 08	HFH
	5	Makwete	4	3	179	73	Aug. 08	HFH
	6	Mtengo	6	4	334	42	Aug. 08	HFH
	7	Daundi	6	4	187	52	Aug. 08	HFH
	8	Vanyiwa	3	5	98	16	Sept. 08	HFH
	9	Nagome	4	3	103	20	Sept. 08	HFH
	10	Subili	5	4	170	61	Sept. 08	HFH
	11	Lomoliwa	5	3	140	112	Sept. 08	Phalombe HC
	12	Mukhota	6	4	156	66	Sept. 08	HFH
	13	Makhanyera	4	5	220	56	Sept. 08	HFH
	14	Kanula	4	5	60	44	Sept. 08	HFH
	15	Namitanga	4	4	183	27	Sept. 08	HFH
	16	Namasoko	6	4	235	79	Oct. 08	Mpasa HC
	17	Tchilima	5	6	87	38	Oct. 08	Mpasa HC
	18	Likhulwa	4	6	190	26	Oct. 08	Mpasa HC
	19	Namangale	5	4	198	56	Oct. 08	Mpasa HC
Sub Total			96	81	3,210	938		
Total Facilitators - Phalombe			177					

Table 2: Coverage of Community ENA Program in Zomba District, Malawi as of July 2009

District /TA Name: Zomba	No.	Village Name	Number of Facilitators as of July 2009		Number of Beneficiaries:		Date Program Started	Name of HSA's Health Center (HC)
			Female	Male	# Households	# < 2 Years		
TA Kuntumanji:	1	Mbwana	2	3	90	48	Sept. 08	Bimbi HC
	2	Chipengule	4	4	203	25	Sept. 08	Bimbi HC
	3	Maunda	5	4	203	127	Sept. 08	Bimbi HC
	4	Nseula	1	4	107	41	Sept. 08	Bimbi HC
	5	Waya	4	5	188	35	Sept. 08	Bimbi HC
	6	Bimbi	7	6	259	101	Dec. 08	Bimbi HC
	7	Chapola	2	2	68	38	Dec., 08	Bimbi HC
	8	Gomba	2	1	60	26	Dec. 08	Bimbi HC
	9	Manyera	4	6	212	88	Dec., 08	Bimbi HC
	10	Mphatama	1	2	75	66	Dec. 08	Bimbi HC
	11	Mwima	6	6	260	72	Dec. 08	Bimbi HC
	12	Nkhwamba	1	2	46	12	Dec. 08	Bimbi HC
Sub Total			39	45	1,771	679		
Total Facilitators-Zomba			84					

The program was rolled out first in Phalombe District from April-October 2008 and 68% of all facilitators are working there. It was then introduced in Zomba from September-December 2008. About half (52%) of all facilitators are women. Fifteen HSAs directly support the facilitators in Phalombe, with most covering one of the villages, but several covering two villages. In Zomba ten HSAs directly support the facilitators, again covering one to two villages each. Nearly three quarters of the program villages in Phalombe receive health services through the private Holy Family Hospital, which is part of the Christian Health Association of Malawi (CHAM). This contrasts with Zomba District where all health services for the program communities are provided by the MOH through Bimbi Health Center.

III. THE ASSESSMENT

A. Objectives

To determine whether the Community ENA Program:

1. Has had a positive impact on: a) nutritional status (growth chart patterns, mid-upper arm circumference (MUAC), b) use of health and nutrition services, and c) male involvement. **Has it made a difference?**
2. **Has been helpful** to HSAs in completing their nutrition responsibilities and what is the role of the HSA and the village outreach clinics in the program.
3. **Has any gaps** in the quality of program processes and inputs that need to be closed before considering scale-up and how to address them.

B. Methodology

The assessment used a mix of qualitative methods (key informant in-depth interviews, observations of outreach clinics, home visits and MFSG meetings, and focus group discussions), and quantitative measurement of program impact through interviews in program and control villages. The sample size and selection process for each of these are summarized in **Table 3**. Every program village in both districts was visited and included in the review sample for applying one or more of the eleven instruments. The assessment reviewed performance at each level of the program, namely beneficiary mothers, fathers, and children, facilitators, village headmen or women, health surveillance assistants and health center staff, the District Health Management Team (DHMT) and BASICS District Office staff, and BASICS Lilongwe staff. A total of 456 people were interviewed and mid-upper arm circumference measurements taken on 121 children under two years in the program villages and 119 children under two years in the control villages.

The eleven instruments used are available on request from BASICS/Malawi. They were drafted by BASICS staff and further refined in a participatory two-day meeting between BASICS and its key stakeholders for nutrition, including the MOH, the World Health Organization (WHO), the United Nations Children's Fund (UNICEF), Community-based Therapeutic Care (CTC) Advisory Services (CAS), and other private researchers.

There were 21 interviewers, of whom 14 were on loan from the MOH, four were from the private sector, and three were from BASICS/Malawi staff. The Nutrition Technical Officer from BASICS headquarters in Washington, DC led the assessment, along with the BASICS/Malawi Community Health and Nutrition Advisor who is the program officer for Community ENA. All interviewers were fluent in the local language, Chichewa. The interviews and focus groups were done in Chichewa. See the list of participants in the assessment in **Annex 1**.

Table 3: Assessment Sample Size and Selection (456 Interviews and 240 Children Measured in Total)

Interview/ Observation	Phalombe	Zomba	Total	Selection Process
District Health Management Team Interview	6	5	11	Selective sampling by virtue of (supposed) involvement in the program- (DHO, DEHO, DNO, MCH, PMTCT, and CTC Coordinators, Nutritionist
HSA Outreach Clinic Observation and Register Review	0	2	2	Observed the only 2 outreach under five clinics scheduled for week of the assessment in Maunda and Manyera.
HSA Register Review – No Outreach Clinic Observation	5	2	7	In Phalombe randomly selected HSAs from list of 15 HSAs responsible for the program villages. In Zomba randomly selected HSAs from list of 10 HSAs responsible for the program villages, excluding those from the outreach observation in Manyera and Maunda.
HSA Interview	6	4	10	
Client Exit Interview at Outreach Clinic	0	11	11	On the spot, selected mothers as they left the 2 outreach under five clinics observed, getting a mix of children of different ages from 0-24 months.
Facilitator Interview	9	6	15	Randomly selected 9 of the 19 program villages in Phalombe, and 6 of the 12 program villages in Zomba. Then randomly selected 1 facilitator in each, excluding those selected for home visits.
MFSG Meeting Observations with Facilitators	6	4	10	Randomly selected 6 of the 19 program villages in Phalombe, and 4 of the 12 program villages in Zomba, not selected for facilitator interviews. Then randomly selected 1 facilitator in each. These facilitators were pre-advised and organized MFSG meetings.
Mothers' Interview and Home Visit Observation with Facilitators	18	12	30	In same villages selected for facilitator interviews, randomly selected 1 facilitator from those not selected for facilitator interviews. Then, randomly picked 2 households with children under 2 years of age from facilitator's list of households to visit with the facilitator.
Village Head(wo)man Interview	6	4	10	Randomly selected 6 of 19 program villages in Phalombe, and 4 of 12 program villages in Zomba, not selected for facilitator interviews.
Mothers and Children Interviews on Program Impact				Randomly selected 6 of 19 program villages in Phalombe, and 4 of 12 program villages in Zomba. Selected equal number of "control" villages from 1 GVH in same district at least 20 km distance from program villages. Randomly visited households to complete 12 interviews with mothers of children <2 years, selecting 1 child per household, the youngest. Village chief identified houses with children <2 years. Took 3 households in each direction (North, South, East, West).
Program Mothers	73	48	121	
Program Children	73	48	121	
Control Mothers	71	48	119	
Control Children	71	48	119	
Focus Group Discussions (FGD)				Randomly selected 6 program villages in both districts to conduct 1 FGD in each. For 2 FGDs with men and 2 with women in each district, randomly selected 1 facilitator in each village, not previously selected for other interviews or meetings. Pre-advised these facilitators who invited women or men to the FGD. For 2 facilitator FGDs in each district, District Coordinator or HSA invited all facilitators from village to the FGD.

The interviewers were trained for two days, including practical experience and pre-testing instruments by applying them at MOH health centers and outreach clinics in Lilongwe, namely Area 25 and Kawale. Further changes were made to the instruments based on suggestions from the interviewers during the training and after the pre-test.

Field work was carried out from July 20-27, 2009. None of the interviewers from the MOH conducted interviews in the same district where they normally work. The MOH, through CAS, provided MUAC tapes for the review.

Two data entry clerks and one data analyst also worked on the review. Quantitative data were analyzed using the Statistical Package for the Social Sciences (SPSS) software.

A. Characteristics of Program and Control Communities

It can be seen in **Table 4** that the ten program villages and the ten control villages in which the impact of the program was measured have similar characteristics in terms of mothers' and children's ages and maternal education. A substantial proportion of the mothers in the program and control communities have no education (30% of program mothers and 25% of control mothers). The assessment team did not find any other differences between the program and control communities in terms of the presence of health or nutrition interventions that could influence the results of the analysis of differences in the data collected to measure the impact of the Community ENA Program.

Table 4 Characteristics of Program and Control Communities

Indicator	Program		Control		Difference
	N	Value	N	Value	
Child's mean age in months	121	12.9 +/- 6.4 SD	117	12.0 +/- 6.0 SD	Not Significant (NS)
Mothers level of education	120		119		
No education		30.0%		25.2%	NS
Primary education		65.8%		70.6%	
Secondary education		4.2%		3.4%	
Tertiary		0.0%		0.8%	
Total		100.0%		100.0%	
Mother's marital status	121		116		NS
Married		91.7%		91.4%	NS
Divorced		2.5%		3.4%	
Widowed		2.5%		0.9%	
Separated		1.7%		2.6%	
Single		1.7%		1.7%	
Total		100.0%		100.0%	

SD= Standard Deviation.

IV. FINDINGS OF THE ASSESSMENT AND DISCUSSION

A. Impact on Nutritional Status – MUAC and growth chart patterns

The Community ENA Program's goal is to improve child nutritional status by improving infant and young child feeding (IYCF) practices and preventing growth faltering (failure to gain adequate weight). To rapidly determine nutritional status of children 6-23 months of age, the assessment team measured the MUAC, which detects acute malnutrition or wasting. There was no statistically significant difference between the program and control communities in the mean MUAC measurement. The mean MUAC measurements were normal according to the 50th percentile of WHO growth standards. There were also no statistically significant differences in the distribution of acute malnutrition as measured by the MUAC categories of wasting of severe, moderate, mild and normal used in Malawi for screening for the Community-based Therapeutic Care (CTC) program as seen in **Table 5**. However, 4% of the children in the program communities were suffering from moderate or severe acute malnutrition versus 1% in the control communities. While measuring arm circumference was an excellent tool for this rapid assessment, its limitation is that it only detects acute malnutrition, and there is a low prevalence of acute malnutrition in Malawi. Therefore, in future evaluations of the program, it would be advisable to measure children's weight and height for age to get a more complete picture of the impact of the program on nutritional status, especially the most prevalent problem of chronic malnutrition (stunting or low height for age) that affects 47% of the children under five years of age in Phalombe District and 51% of the children in Zomba district according to MICS 2006.

There were no significant differences in growth trends between program and control communities as determined by examining the weight gain for age curve on the children's health passports (**Table 5**). Examining overall growth trends by age, the survey results showed that in the 17 infants 0-5 months of age in the combined sample of program and control villages, there was no growth faltering, with 100% of these infants gaining weight normally. However, in sharp contrast, one-third of all children 6-23 months of age in the combined sample of 123 children were not gaining adequate weight. This pattern of adequate growth during the breastfeeding period in the first six months of life was seen throughout the assessment when children's growth charts were examined. This suggests that breastfeeding practices are adequate for the most part. However, the clear pattern of initiation of growth faltering when complementary feeding begins around six months of age, and the continuation of this failure to gain adequate weight through the second year of life, was also commonly seen in reviewing growth charts during the assessment. The program has focused more on improving breastfeeding practices and the big remaining challenge is to improve complementary feeding practices in order to achieve adequate weight gain and prevent growth faltering.

Table 5 Child's Health Passport, Growth Trends, and Mid-Upper Arm Circumference (MUAC)

Indicator	Program		Control		Difference
	N	Value	N	Value	
Child has health passport	121		118		Not Significant (NS)
Yes		70.2%		69.5%	
No		29.8%		30.5%	
Total		100.0%		100.0%	
Reasons for no growth chart	21		20		NS
Out of stock at facility		23.8%		60.0%	
Lost it		38.1%		5.0%	
Uses a notebook		19.0%		10.0%	
Church does not allow		0.0%		5.0%	
Don't have money		9.5%		10.0%	
Never attended clinic		9.5%		10.0%	
Total		100.0%		100.0%	
Growth chart up-to-date	83		80		NS
Yes		86.7%		80.0%	
No		13.3%		20.0%	
Total		100.0%		100.0%	
Growth trends	73		68		NS
Weight is increasing		68.5%		73.5%	
Weight is staying static		13.7%		5.9%	
Weight is decreasing		17.8%		20.6%	
Total		100.0		100.0%	
Average attendance for monthly weighing	107	72.2 +/- 23.2 SD	106	76.8 +/- 20.5 SD	NS
% Attendance at monthly weighing by category	108		107		NS
Never		0.9%		0.9%	
Less than 25%		4.7%		0.9%	
>= 25% and <50%		12.0%		11.2%	
>= 50% and <75%		27.8%		24.3%	
75% and above		54.6%		62.6%	
Total		100.0%		100.0%	
Mid- Upper –Arm circumference in children 6-23 months of age					
6-11 months	40	14.2 +/- 1.7 SD	38	14.3 +/- 1.4 SD	NS
12-23 Months	59	14.6 +/- 1.3 SD	58	14.5 +/- 1.1 SD	NS
Total	99	14.4 +/- 1.4 SD	96	14.4 +/- 1.3 SD	NS
Acute Malnutrition (6-23 months)	99		96		NS
Severe (MUAC < 11.0cm)		2.0%		1.0%	
Moderate (MUAC 11.0-11.9 cm)		2.0%		0.0%	
Mild (MUAC 12.0 – 13.4cm)		16.2%		17.7%	
Normal (MUAC >=13.5 cm)		79.8%		81.3%	
Total		100.0%		100.0%	

B. Assessment of Health and Nutrition Outcomes and Related Outputs

1. Growth Monitoring and Promotion Participation

Regular participation at growth monitoring and promotion monthly sessions has been shown to be necessary for this intervention to have an impact on preventing growth faltering. In the program villages, children can be weighed either at the monthly mobile outreach clinics for children under five conducted by HSAs that cover several villages at one time, or in their own village by the program facilitators. There is some duplication of effort. In the control villages all weighing is done only at the outreach clinics. One pre-requisite for success is that every child has its own weight gain growth chart. In Malawi these charts are included in what is called the “Health Passport Child Health Profile,” which is a booklet with additional important information on immunization status and medical history. Parents must purchase these charts at the health center. The assessment found no difference in passport possession between program and control communities, with 30% of children not having a health passport (**Table 5**). School exercise or note books are often used for children with no health passport, in which weights taken are listed, but there is no growth curve. The absence of growth charts with weight gain curves seriously impairs the parents’, facilitators’ or health workers’ ability to diagnose correctly whether the child is gaining adequate weight. The reasons for lack of availability of health passports will be discussed later in the report under “Supplies and Equipment.”

For children less than two years of age with growth charts, 80% or more of their charts were found to be up to date in program and control communities. Regularity of attendance at monthly growth monitoring and promotion sessions was measured by counting the number of monthly weight plots on each child’s growth chart or notebook and dividing that by the child’s age in months. It was impressive to see that children in the program communities had attended monthly weighing 72% of the expected times (months) on average, and children in the control communities 77% of the time. The differences are not statistically significant. A benchmark for successful programs in other countries is 80% attendance. So the program still has a ways to go, but the currently high attendance rate is encouraging. It is noteworthy that the control area was able to achieve such high attendance with just the traditional outreach clinics run by HSAs, despite mothers needing to travel a greater distance to reach these. The addition of facilitators doing weighing in the program villages was not more effective. Of greatest concern are the nearly 18% of children in the program communities who attend fewer than half of the expected times. Experience shows that these children are often at greatest risk. Their failure to attend is a red flag, and home visits to determine why not and to address their problems should be a high priority.

The big draw of the outreach clinics is immunization services. In the control area, the average attendance by children less than one year 79.5% of the time at outreach clinics was higher than the average attendance of children 12-23 months 74.2% of the time. The data show a slight drop in attendance of children over one year of age in control villages, not seen in program villages. The HSAs told the review team that a few parents bring their children less regularly to be weighed once immunization has been completed by one year of age.

2. Immunization

Although the Community ENA Program did not focus directly on increasing childhood immunization coverage, it was hypothesized that the program might have a positive effect on immunization status through the facilitators encouraging parents to get their children immunized. It can be seen in **Table 6** that the program had no significant effect on immunization status. From the review of children's health passports or notebooks, the assessment found that 78% of children in the program villages and 83% in the control villages were up to date on immunizations received for their age according to the MOH immunization schedule. Furthermore, 75% of children 12-23 months in the program area had been fully immunized compared to 83% in the control area. Information on the coverage for specific antigens can be found in **Table 6**.

Table 6 Child's Immunization Status

Indicator	Program		Control		Difference
	N	Value	N	Value	
Current for child's age	115		114		NS
Yes		78.3%		83.3%	
No		21.7%		16.7%	
Total		100.0%		100.0%	
Percent of children aged 12-23 months fully immunized with health passports	56		54		NS
Yes		75.0%		83.3%	
No		25.0%		16.7%	
Total		100.0%		100.0%	
Percent of children 12 -23 months who received					
BCG	60	90.0%	58	91.4%	NS
Measles	61	83.6%	58	91.4%	NS
Polio 3	62	87.1%	58	87.9%	NS
DPT Hep B-Hib 3	62	85.5%	57	91.2%	NS

3. Antenatal Care and Institutional Delivery

There has been a big push by facilitators in the Community ENA Program to get pregnant women both to make their first antenatal visit in the first trimester and also to deliver their babies at an institution (health center or hospital) and not at home. Attendance at antenatal care (ANC) in the most recent pregnancy was very high in both the program and control villages, at 100% and 97% respectively, and the differences are not significant. See **Table 7**. A higher percentage of women in the program villages attended ANC in the first trimester, 27% versus 15% in the control group. However, these differences did not reach statistical significance, perhaps due to the small sample size. The Medical Assistant in charge of the Bimbi health center, which serves the program villages in Zomba District, also reported that they have seen an increase in attendance for early ANC by women from program villages, with 67 women coming, versus 50 expected per historical trends.

Table 7 Women’s Use of Antenatal Care and Institutional Delivery Services

Maternity Services	Program		Control		Difference
	N	Value	N	Value	
Mother attended antenatal care					
Yes	120	100.0%	118	96.6%	NS
No		0.0%		3.4%	
Total		100.0%		100.0%	
Timing of first antenatal care	120		114		NS
1-3 Months		26.7%		14.9%	
4-5 Months		48.3%		48.2%	
6-7 months		20.0%		29.8%	
7-8 months		5.0%		7.0%	
Total		100%		100%	
Place of delivery	121		119		NS
Institutional delivery		67.7%		65.4%	
At TBA’s home		2.5%		8.4%	
At home		29.8%		26.1%	
Total		100%		100%	

There were no differences between program and control communities in the place of delivery of the most recent baby, with approximately two-thirds of women delivering in institutions. The high percentages of home deliveries, 30% in the program area and 26% in the control area, are still a cause for concern (**Table 7**).

4. Home Visits

Timely home visits are a critical part of the Community ENA Program strategy. The intent of these visits is to reinforce behavior change messages and counseling, to identify and help women and children at-risk or at critical stages along the pregnancy-breastfeeding-complementary feeding continuum, and to make referrals to the health center, if necessary.

a. Mothers’ Responses on Home Visits

Increasing the frequency of home visits by having facilitators in the village to do these visits is the most significant accomplishment of the Community ENA Program. Compared to the control communities where only 23% of mothers stated they had received a home visit by a

facilitator or health worker in the past three months, in the program villages 69% had received home visits in this time period (**Table 8**). Furthermore, for those who could recall the date of the most recent visit, 62% of mothers in program villages had received a home visit during the past one month versus only 19% of control mothers. These differences are highly significant statistically. However, the data do not permit distinguishing whether these visits were by facilitators or health workers. The top four reasons in rank order for the home visits according to the mothers in Phalombe were hygiene education/sanitation, growth promotion, cooking demonstrations/complementary feeding, and malaria/insecticide treated bed nets. In Zomba the top four reasons in rank order for the home visits according to the mothers were cooking demonstrations/complementary feeding, breastfeeding, growth promotion and hygiene education/sanitation.

Table 8 Home Visits by Health Workers or Facilitators per Mothers' Responses

Indicator	Program		Control		Difference
	N	Value	N	Value	
Visited by health worker or facilitator in past 3 months	105		100		
Yes		68.6%		23.0%	Significant (p = .000)
No		31.4%		77.0%	
Total		100.0%		100.0%	
Date last visit received	47		16		
Within the past one month		61.7%		18.8%	Significant (p = 0.018)
Between 1 and 2 months ago		19.1%		50.0%	
Between 2 and 3 months ago		17.0%		31.3%	
3 months ago and over		2.1%		0.0%	
Total		100.0%		100.0%	

b. HSAs' Responses on Home Visits

During in-depth interviews with ten HSAs, they reported that they are constrained from making many home visits, because they each cover several entire villages and have to run the outreach clinics and perform other duties. The HSAs reported making an average of 13.7 ±10.4 SD. There is a wide variation, with six of the ten HSAs making ten or fewer home visits per month. Three reported making over 20 home visits. The main purposes of their home visits are to check on the work of the facilitators, do counseling or give health talks. Seven of the ten HSAs mentioned that they prioritize homes to visit based on risk information, such as pregnancy, newborns on the first day and in the first week of life. But only half of these mentioned child nutritional problems, such as not attending the weighing session, not gaining adequate weight, or severe acute malnutrition as risk criteria.

c. Facilitators' Responses on Home Visits

The 14 facilitators interviewed in-depth made an average of 2.6 ± 1.8 SD home visits per month. Twelve reported that they make 1-5 home visits per month, and two reported making 5-10 visits. Each facilitator covers an average of only seven children less than two years of age and one pregnant and one postnatal woman in their catchment areas. The

small target population covered may explain in part why they make few home visits. Furthermore, the very small group they are responsible to reach gives them the luxury of making home visits without the need to prioritize based on risk criteria. Indeed only three of the facilitators interviewed demonstrated knowledge of how to prioritize home visits based on nutritional risk. It is a costly, inefficient approach to visit all households, regardless of risk, even if workload is small. They reported visiting the homes of newborns within the first four days of birth, but mostly after the first day. Most facilitators record home visits they make in registers in contrast to HSAs who do not keep records of home visits they make.

d. Observation of Facilitators' Counseling Skills in Home Visits

The assessment team was able to make thirty home visits with facilitators and observe their nutrition counseling skills. As seen in Table 9, the facilitators were strongest at establishing good rapport, actively involving the mother or caregiver and listening to the mother's or caregiver's answers to better understand the situation and tailor their advice. They were weakest in reaching a specific agreement with the mother or caregiver on follow-up actions and discussing specific recommendations. Nearly half failed to praise the mother or caregiver for good practices or to refer to the child's weight gain on the growth chart in the health passport.

Table 9 Facilitators' Nutrition Counseling Skills during Home Visits

Counseling Skill	N	Yes	No
➤ Good rapport	30	90.0%	10.0%
➤ Counseling steps			
○ Asks about feeding practices, health of the child and mother	30	83.3%	16.7%
○ Listens to mother's answers	30	96.7%	3.3%
○ Assesses what the mother is doing compared to what she should be doing	30	63.3%	36.7%
○ Praises mother for anything well done	30	56.7%	43.3%
○ Refers to health passport to explain the growth of the child to the mother	30	56.7%	43.3%
○ Discusses specific recommendations with the mother, relevant to the child's situation	30	53.3%	46.7%
○ Actively involves the mother in the discussions/negotiation	30	80.0%	20.0%
○ Reaches specific agreement on what the mother will do over the next month	30	36.7%	63.3%

5. Referrals to Health Facilities and Counter Referrals

In Zomba district, a system of referrals and counter referrals by facilitators to the Bimbi Health Center of people in their catchment area has been well established. The Medical Assistant in charge of the Bimbi health center said it was working very well and showed the assessment team many completed referral forms. However, in the focus group discussions with facilitators and men and women from program communities the referral system received mixed reviews. The main complaints were that the referrals by the facilitators were not respected as legitimate by some health center staff. Furthermore, once community members acted on the referral and went to the health center, they were treated badly. It appears that orientation of health center staff and change in their behavior are needed to make the referral system work well. Phalombe district should learn from the experience of the Bimbi health center and introduce a similar system, but only after orienting the health center staff.

During home visits accompanied by facilitators, the assessment team interviewed mothers and ascertained that 38 % of them (11 mothers) had been referred to a health center by a facilitator or an HSA. The main reason for referral in 73% of the cases was because the child was sick. Other reasons mentioned once only were for PMTCT, check-ups, ANC, and supplementary feeding. Seven of the eleven referred followed through and went to the health center. The remaining four said they did not go because they had not been sick since then. Out of the seven who went to the health center upon being referred, two were satisfied with services, two were not, and the rest did not respond. One woman said she was not satisfied with the services because she was told to wait in the queue along with other outpatients. The other woman said she was not satisfied because she was not enrolled on Anti-retroviral Therapy (ART) due to the TB treatment she was taking.

6. Micronutrient Supplementation

Increasing use of Vitamin A and iron/folic acid supplements is not the main focus of the Community ENA program. However, the assessment team was concerned that none of the children whose charts were reviewed were receiving Vitamin A supplements, as noted in either their health passports in both Phalombe and Zomba or in the Bimbi health center registers. When the team asked health staff why the children had not received Vitamin A, they said it was out of stock. They also noted that the main delivery mechanism used for Vitamin A is National Child Health Days, twice a year. However, if the child received Vitamin A on these special days it should have been recorded in their health passport, especially because of the danger of toxicity if duplicate doses are given. National Child Health Days do not benefit postnatal women who need to receive Vitamin A within eight weeks after delivery, to avoid the dangers of supplementing a woman later who may already be pregnant again. It does not appear that postnatal women are receiving Vitamin A supplements due to the stock outs.

When reviewing the antenatal register at Bimbi health center, the assessment team also noted that pregnant women had not been given iron/folic acid supplements, because the health center staff said that they were out of stock. The Medical Assistant in charge also reported that they order their supplies of iron/folic acid supplements based on what they used last month, and not on what is needed for universal coverage, so when increased numbers of women come for ANC early, they run out of supplies (this becomes a vicious circle of repeated stock outs).

These micronutrient supplementation programs are essential nutrition actions that need more attention by both DHMTs and the MOH at central level in order to achieve universal coverage. They are top-ranked interventions given their tremendously high benefits compared to costs.² It is well established throughout the world that pregnant women cannot meet their increased needs for iron/folic acid from diet alone. The same holds true for children under five who cannot meet their Vitamin A requirements from diet alone.

During the de-briefing on the assessment findings, USAID informed the team that USAID/Malawi has given UNICEF funding to procure and supply these micronutrients for the national supplementation programs in Malawi. Thus, they were surprised to hear that there were stock outs in Phalombe and Zomba districts.

C. Impact on Male Involvement

The community ENA program has been able to significantly increase male involvement during pregnancy and the postnatal period, most notably by men helping with household chores to reduce women's workload. As seen in **Table 10**, according to mothers, male involvement is greater in the program communities, especially during pregnancy. The differences in increased male involvement in reducing the wife's workload during pregnancy and lactation seen in program versus control villages are statistically significant, and highly so during pregnancy.

In focus group discussions, the facilitators gave the impression that it has been a challenge to convince men with their messages. Men have been reluctant to attend the same meetings with women. On one hand this has been influenced by culture or tradition, and on the other hand it has been the sensitivity of the issues discussed. For instance, when the items on the meeting agenda include pregnancy men express the feeling that this issue is specifically for women such that the next time a meeting is called men shun it. But through the home visits, little by little men have opened up and understand that they are equally responsible for most maternal and child health and nutrition issues, and they have to be involved or should take an active role. It has been more effective to communicate with men in men-only meetings.

The HSAs interviewed reported that the main roles men play in the Community ENA Program are doing chores to reduce their wives' workload, helping with child care, ensuring that their children attend under five clinics, and attending cooking demonstrations.

The general picture obtained from the focus group discussions with both facilitators and men and women from the program communities is that men were reluctant to take part in maternal and child health issues before the program. Male involvement was previously limited to making provisions for their pregnant spouse in preparation for the date of delivery of their child. The prevailing view now is that men have been mobilized to play a greater role in promoting the timely attendance of their spouses at antenatal care. Men provide assistance in making sure that women stay healthy through provision of the required balanced diet, carrying out domestic chores to reduce the burden on their pregnant spouses and providing transport to and from the health facility during pregnancy and after delivery. Women expressed that they expect their spouses to source food, to buy clothing that helps them stay comfortable during pregnancy and always be available for the women in times of need.

² See the highest cost-benefit ranking given to micronutrient supplements of vitamin A and zinc for children by the Copenhagen Consensus at www.copenhagenconsensus.com.

Table 10 Husband's Involvement in Assisting his Wife during Pregnancy and after Delivery

Indicator	Program		Control		Difference
	N	Value	N	Value	
During pregnancy					
Reducing wife's workload	111	38.7%	106	22.6%	Significant (p = 0.008)
Sourcing food for the woman	111	71.2%	106	64.0%	NS
Facilitating health seeking behavior	111	18.9%	106	12.3%	NS
VCT for the couple	110	2.7%	106	0.9%	NS
Providing Moral support	111	32.4%		22.6%	NS
Material support e.g. clothes, money for transport	111	45.9%	106	37.7%	NS
Facilitating decisions against harmful cultural practices	111	1.8%	106	1.9%	NS
Encouraging better diet	110	0.9%	106	2.8%	NS
After delivery					
Reducing wife's workload	108	30.6%	105	17.1%	Significant (p = .016)
Sourcing food for the child and mother	110	54.5%	105	55.2%	NS
Facilitating health seeking behavior	110	14.5%	105	12.4%	NS
VCT for the couple	110	6.4%	105	1.9%	NS
Providing Moral support	110	22.7%	105	19.0%	NS
Material support e.g. clothes, money for transport	110	61.8%	105	53.3%	NS
Facilitating decisions against harmful cultural practices	110	3.6%	105	1.9%	NS
Encouraging better diet	111	2.7%	106	5.6%	NS

A male group discussion in Daundi, Phalombe indicated that from their perspective, pregnant women expect a few things from their spouses including consistent love before conception through to delivery, readiness to offer transport to the health facility when signs of labor begin, participation in some of the key household chores and in general it is their understanding that during pregnancy it is almost equivalent to "**pension time to the spouse**" (literally referring to time of rest) in terms of carrying out household chores. Men also expressed that some women have strong reservations on men's participation. They only see men's involvement as appropriate when the women are ill themselves.

The areas of male involvement mentioned in focus groups with facilitators include responsibility for making various food items available in the home for children and pregnant mothers, helping out with domestic chores in cases where the woman is unable to accomplish them (including cooking, drawing water, sweeping and washing), escorting pregnant spouses to antenatal care services, escorting under five children for growth monitoring when the spouse is tied up with household chores or is in ill health.

In interviews with DHMT members they expressed that there is not enough male involvement yet. Their suggestions for increasing male involvement include: a) giving notification slips to women to bring their spouses to the hospital and attending those first who come with partners; b) increasing community mobilization through open day activities since they were done only twice (one was planned and the other one was done because visitors were coming to visit the project area)³; c) intensifying home visiting; d) encouraging men to take part in the demonstrations, e.g. proper positioning for breastfeeding; and e) using role models like watchmen at the health center to give health talks.

There are a number of gender issues that arise with having both male and female facilitators that have not been fully considered and merit re-examination. Are men effective providing counseling and home visits to women on sensitive topics such as pregnancy, breastfeeding, HIV/AIDS, family planning methods? For example, it is crucial to estimate the expected date of delivery by asking a pregnant woman the date of her last menstrual period, and it is not appropriate for a man to be asking about this. On the other hand, male facilitators are probably more effective working with groups of men to increase male involvement, than women facilitators can be.

D. Assessment of Program Inputs and Processes

1. Capacity Building

a. The Training Process

Initial capacity building for HSAs and facilitators has been one of the main investments of the Community ENA Program to date. The program was launched following a six-phase process, which is briefly described here.

Phase One: Policy level –consensus-building with key stakeholders and preparations for drafting the training manual. Key stakeholders including the MOH, DHMT, UNICEF, and WHO were consulted by BASICS nutrition staff on the design of the Community ENA Program, plans for MFSG Facilitators, and the proposed pilot districts. BASICS did literature review on the child health and nutrition situation in Malawi, relevant programs and available training materials.

Phase Two: Drafting the training manual. Based on the consultations and literature review, a training manual was drafted.

³ An “open day” is a community mobilization activity at which the DHMT, other district health staff, and facilitators share displays of various ENA activities taking place in the community and at the health center.

a) *Course objectives for the manual were:*

- Increase knowledge and skills of the District Health Office (DHO) staff and HSAs to enable them to train, mentor, supervise and monitor community-based facilitators. Implementing High Impact (HI) Essential Nutrition Actions with mothers and fathers.
- Facilitate establishment of sustainable community- based support groups by facilitators.
- Facilitate community-based promotion of good nutrition and prevention of malnutrition by imparting hands-on skills for practical demonstrations of ENA across the continuum from pregnancy, postpartum, breastfeeding, and complementary feeding, including family planning and PMTCT.
- Provide comprehensive, community-based mother-infant pair follow –up from pregnancy through two years for all mothers, regardless of HIV status through facilitators.
- Develop referral system to link target populations served by facilitators' community- based activities with village health clinics and health facilities.
- Collaborate with the DHMT, Village Health Committees and Traditional Authorities in related activities and submit reports to the DHO.

b) *Course structure:* The training 225 page training manual consists of eight modules:

Module 1: Health situation analysis of mothers and children,
Module 2: Maternal Nutrition during pregnancy and lactation period
Module 3: Child health and nutrition from 0-6 months
Module 4: Child health and nutrition from 6-24 months
Module 5: Community PMTCT counseling
Module 6: Family care practices
Module 7: Community mother father support groups
Module 8: Household records

c) *Duration of training:* 8 days: 5 days technical materials and 3 days community approach.

d) *Target group for training:* Health professionals and HSAs serving program communities.

e) *Training Team:* Professional staff with a background in under five health activities, maternal and child health and family planning and PMTCT were identified by the MOH Department of Nutrition from central and district levels. BASICS led the team and oriented the trainers in ENA.

Phase Three: District Level Training: Capacity building commenced in March 2008 in Phalombe district, in one village, Nyambalo. Training began in Zomba district in July 2008. The process included:

- a) *Orientation of the DHMT on the Community ENA Program and the training manual.*
- b) *Training of trainers (TOT) course for DHO professional staff & HSAs to enable them to train and supervise the facilitators.*
- c) *Translation of training manual into the local Chichewa language.*
- d) *Adaptation of the extensive training manual (translated version) into an abbreviated version of 107 pages for training of and use by facilitators.*
- e) *Community mobilization, mapping, and selection of facilitators by BASICS staff, the professional trainers, HSAs and DHO staff, village heads and the community.*

Phase Four: On-site training of community based facilitators in their own village: Eight to ten facilitators were trained to serve 18 -20 households each in their catchment area by the professional trainers and HSAs. The village heads also attended the training.

Phase Five: Community level program launch: Program launched by village heads and HSAs, registration of households by facilitators with HSAs for identification of at-risk women and children below age of 2 years, work plan of activities, initiation of activities by facilitators in their respective allocated households.

Phase Six: Roll out to other villages: Initially, training was conducted one village at a time. However, after two training experiences, two to three training teams were formed to simultaneously train facilitators in four to villages at a time. This accelerated rollout.

b. Assessment Findings on Capacity Building

During focus group discussions with facilitators, those from Phalombe indicated that the eight-day training, plus 3-day progress review they attended were of adequate length and very useful. However, in Zomba, where facilitators attended only the eight-day training, there were complaints that the training was too short. In both districts, the facilitators would welcome in-service training or a refresher course. The program currently has no system for on the job training or mentoring of the facilitators. Most facilitators (80%) reported that they meet with other facilitators at least once a month, with 40% saying they meet each other 2-3 times a week. These meetings might provide an opportunity for in-service training by supervisors.

i. Training Manual

The review of the training manual by the assessment team revealed some gaps. Content to be added includes information on the role of HSAs and village outreach clinics in the Community ENA Program, Vitamin A and iron/folic acid supplementation, growth monitoring and promotion and organizing these sessions and effective counseling, home visits and referrals, job aides for counseling, supervision, registers, and a monitoring and evaluation system. However, there is a need to make the manual shorter (it is 225 pages long, with 25% dedicated to PMTCT of HIV/AIDS through infant feeding), competency-based and well aligned with the HSA's manual (May 2009). The planned component of the program on PMTCT through infant feeding has not been launched yet, and will be added later. Therefore, this content in the current manual should be removed and introduced in a separate module later. There are 45 pages dedicated to breastfeeding (20% of the manual) versus half that number on complementary feeding. It was agreed that the training manual needs to be completely revised or replaced before using it any further. The BASICS Nutrition Technical Officer discussed with the BASICS/Malawi nutrition staff detailed suggestions for revisions to the training manual and left an annotated version.

Several relevant, well-prepared, practical and more concise training manuals for HSAs were reviewed as part of the assessment, including the general Training Manual (May 2009), the Facilitator Training Manual and the Community-based Maternal and Neonatal Care Manual (October 2008). For PMTCT of HIV/AIDS, the Training Module for a 2-day Course for Health Workers: A Chance for Infants and Children with HIV in Malawi: Providing Early Infant Diagnosis, Care and Treatment (2008) prepared by USAID/BASICS is also excellent. Where the subject areas are the same in these manuals as in the

Community ENA training manual prepared by BASICS, it is advisable to just use these official MOH manuals in the Community ENA Program or replace the content in the BASICS training manual with the content of these manuals already used nationally by HSAs. The volunteer community level facilitators do not need more detail than that deemed necessary for the HSAs. The MOH's official HSA training manual covers 28 different units on a wide array of diseases and health services in 170 pages, compared to the 225 page Community ENA Program training manual, which covers far fewer technical areas. Not using existing official MOH manuals causes confusion and inconsistency, impairs prospects for scale-up and sustainability, and increases the time and cost for rolling out the Community ENA Program. The representative of the MOH Nutrition Department also told the review team that the MOH has a draft manual on ENA, which was prepared with USAID assistance through the Food and Nutrition Technical Assistance Project (FANTA), by adapting similar manuals used in other African countries. She requested that BASICS synchronize its Community ENA training manual with that of the MOH.

ii. Other Nutrition Training Courses received by HSAs and Facilitators

The HSAs and facilitators interviewed stated that the training received from BASICS for the Community ENA program was the main nutrition training they had received. A few HSAs and facilitators had also been trained in CTC for treating acute malnutrition.

2. Role of HSAs and Facilitators

a. Role and Selection of Facilitators

The focus group discussions with facilitators indicated that there was transparency in the way they were selected. The main prerequisites were ability to read and write, reliability, and trustworthiness in respecting confidentiality of information. See the separate report on the findings of the focus group discussion for more details. Nine out of ten village heads interviewed said that the community was involved in selecting the facilitator and in only one case did the village head make a unilateral decision. Only 40% of the facilitators are members of the village health committee. To date, 12% of the facilitators trained in Phalombe district have dropped out, whereas zero drop-out was reported for Zomba district.

Community leaders interviewed stated that male facilitators are able to perform all of their necessary duties. The community has accepted these men giving talks on good breastfeeding practices and doing cooking demonstrations, even though these might once have been considered exclusively a woman's domain.

The average length of service of the 15 facilitators interviewed is 10 months. They described their regular program duties as doing cooking demonstrations, home visits, growth monitoring and promotion, health talks, and referrals to health centers, with cooking demonstrations mentioned most frequently. A few also mentioned screening for malnutrition. The 10 HSAs interviewed described the facilitators' duties in similar terms, but mentioned home visits most frequently. In addition to these duties, community leaders also mentioned that facilitators promote increased male involvement.

b. Role of Health Surveillance Assistants

The average length of time of on the job for eight of the ten HSAs interviewed was 1-2 years, with the others serving longer. Many of those serving for less than two years had not yet received the basic HSA 10-week training course from the MOH, and therefore found the Community ENA Program training received from BASICS even more useful. These HSAs described their main nutrition responsibilities as cooking demonstrations, health talks, growth monitoring and promotion, screening for malnutrition, provision of Vitamin A, screening for malnutrition and supervising volunteers. They reported covering an average population of $1,174 \pm 627$ SD. There is a wide variation, with four of the HSAs covering less than a thousand people, and the other six covering more than a thousand people.

In the assessment start-up meeting with stakeholders, the representative of the MOH Nutrition Department asked how many hours per month BASICS expects HSAs to spend on the program. There was no clear answer, as this has not been defined. BASICS staff noted that the first six weeks of program start-up in a community are the most labor-intensive for HSAs as they need to help map the village and participate in identification and orientation of facilitators.

3. Supervision

a. Supervision of Facilitators by HSAs

The HSAs interviewed reported that they supervise an average of 12 facilitators each by making supervisory visits and holding meetings with facilitators. Half of the HSAs reported that they hold these meetings at least once a month and half every two months. This information was corroborated in the facilitators' responses. Only half of the HSAs prepare minutes on these meetings, but only one of them could show the minutes to the review team. The program has no guidelines on how often HSAs should meet with facilitators for supervision purposes. This is left up to the HSAs to determine in the course of their general work planning. In interviews with DHMT members they cited lack of transport as the main constraint HSAs face in supervising facilitators, and said the DHO helps with transport to the extent that they can. In Phalombe district they have secured a donation from Concern Universal of 40 bicycles for HSAs to use in supervision, which will be distributed in all areas, including the Community ENA Program villages.

In focus group discussions, facilitators shared that they are receiving inadequate feedback on the monthly performance reports that they submit to the DHO through the HSAs. The facilitators consider this a disincentive because they are not told whether they are doing a good job or not or whether their contribution is valued. Besides lack of feedback on their activity reports, the facilitators expressed concern that visits by health workers (other than HSAs) and by BASICS personnel to the intervention sites are quite minimal. Furthermore, there is no forum beyond their village to share experiences and solve common problems. These gaps are affecting their morale.

The assessment team learned that the nutrition section of the Office of the President of Malawi is considering re-introducing a cadre of home-craft nutrition workers who would each cover 5-6 villages. One thought is that such workers could fill the critical supervisory niche in programs such as Community ENA, that is currently a challenge for HSAs to do well on top of their many other duties.

b. District and Health Center Supervision of HSAs

Nearly all HSAs interviewed had received a supervisory visit from both the health center and district level within the past two months, with around half having been visited within the past month.

c. HSA Workload

Nearly all HSAs interviewed think that having facilitators has reduced their workload, because the facilitators help with the outreach clinics for under fives, identify underweight children and vulnerable households, and assume some of the duties of the HSAs. They have noticed positive changes in the communities where there are facilitators, such as reduced malnutrition, fewer infant and newborn deaths, and increased use of antenatal care. However, the review team was concerned that since the respective roles of the HSA and the facilitator in the Community ENA Program are not well defined, HSAs seemed to be delegating too many of their nutrition responsibilities to these unpaid volunteers.

4. Work Planning by Facilitators and HSAs

Nearly all facilitators (80%) were able to show the assessment team the work plans that they had prepared for their activities over the next few weeks. All facilitators in one village meet with the HSA to prepare one collective work plan for the village. The most common activities planned are health talks, cooking demonstrations, report writing, home visits, attending antenatal clinics and village meetings. The work plans, which the HSAs shared with the interviewers when asked about their activities in the Community ENA Program, are the same village level work plans prepared by the facilitators. The HSAs prepare a general work plan for their overall work, which may or may not contain any activities they will do in the Community ENA Program. They forward the village level facilitators' work plans to the health center staff, who then send these plans to the district. This is another illustration of the lack of clarity on the specific responsibilities of the HSAs in the program.

5. Role of DHMT and Coordination

The main roles of the DHMT in the Community ENA Program are training, supervision and provision of transport for supervision, health service provision to clients referred by facilitators, and participation in "Open day" activities. The DHMT coordinates the Community ENA Program from the DHO office through health center staff in charge in liaison with HSAs working in communities with facilitators. The HSAs who coordinate and supervise the implementation of activities at community level, report to the overall HSA supervisor, who in turn reports to the health center in charge. Coordination also takes place through meetings with health center staff and HSAs, follow-up visits, reports, use of registers, supervision, work plans, sharing of monthly progress data and cell phones.

During in-depth interviews with eleven members of the two DHMTs they expressed that there is a need to improve communication among the players, namely the DHO offices, Health Centers, Village Heads and facilitators. They suggested the program follow more of a multi - sectoral approach, e.g., involving non-governmental organizations (NGO) and other stakeholders working in similar nutrition activities⁴. The DHMT members would like

⁴For Phalombe, the DHMT mentioned the following NGOs working there: Blantyre Synod, Evangelical Lutheran Development, Action AID, and Salvation Army, and for Zomba: World Vision, Save the Children, Red Cross, and the Millennium Villages Project. The DHMT also mentioned the World Food Programme, the USAID/ACCESS maternal and neonatal health project, St. Luke's Hospital and the CHAM Chipini Health Center.

to see more frequent updates on the progress of program activities, follow-up visits and joint review meetings with BASICS. They recommended doing some kind of a benchmarking process to improve the quality of program implementation by learning from villages that are performing well.

6. Role of Village Heads

The Community ENA program has actively involved the village heads at every stage of the program and thereby increased local ownership. The ten village headmen or women interviewed in the program villages reported that there are an average of 226 households in their villages and a population 1,134. Most have been village heads for more than five years. They see their main role in the Community ENA program as conducting/attending meetings, mobilizing the community, resolving problems, and supervising the facilitators. The HSAs interviewed described the main roles of community leaders in the Community ENA Program as influencing change in harmful traditional practices and encouraging male involvement.

7. Behavior Change Communication

a. Mother Father Support Group Meetings and Nutrition and Health Talks

As background for reviewing the mother father support group component of the Community ENA Program, the team took the commonly used international definition of and criteria for such groups as the starting point. These are found in the review of Mother Support Groups done by USAID/BASICS in 1998,⁵ and can be summarized as follows:

“A support group is loosely defined as a group of people who meet to provide mutual assistance.” Researchers have set three criteria for support groups: “(1) members must share a common situation or problem, (2) assistance is provided mainly through members helping members, and (3) no fees are charged (Meissen and Warren 1994).”

“In assessing a support group's effect and viability, the quality of the interaction between group members may be more important than arbitrary indicators, such as regular meetings or good attendance. At a minimum, a support group should allow members to share ideas and feelings. A lecture delivered to a group of passive listeners does not meet the criteria for a support group. However, a small group meeting after the lecture could qualify, assuming that members interact and derive some psychological benefit from their interaction.”

The review team found that the concept of support groups in the Community ENA Program does not meet the definition and criteria above. The actual program approach can be better characterized as infrequent meetings organized by facilitators with mothers or fathers at which lectures are given. The wide range of issues being addressed by the program across the continuum from pregnancy through the first two years of life does not lend itself to homogeneous groups of members sharing a common situation or problem. Assistance is not provided mainly through members helping members, but rather through the facilitator individually helping members by playing the traditional role of a “community health volunteer.” Thus, the term “facilitator” used in the program is also a bit of a misnomer, because this worker is not facilitating mothers, fathers or caregivers to help each other in groups.

⁵ Green, Cynthia P. 1998, *Mother Support Groups: A Review of Experience in Developing Countries*, BASICS.

i. Facilitators' Responses on Mother Father Support Group Meetings

When asked during interviews with 15 facilitators about support group meetings they had organized in the last three months, it became clear that facilitators do not organize such meetings. Neither is there a "support group" that follows the above definition. Instead, the facilitators deliver health or nutrition talks at growth monitoring and promotion sessions, cooking demonstrations and make home visits.

ii. Observations of Mother Father Support Group Meetings

Based on the initial understanding that the program was promoting support groups, as practiced elsewhere, the assessment process included randomly selecting ten facilitators and asking them to organize a support group meeting that could be observed by the interviewers. While these meetings were organized as requested, it was readily apparent that holding such meetings regularly is not the norm. The facilitators gave lectures at these meetings organized for the assessment team's visit, with the most common topic being breastfeeding at six of the ten meetings. Other themes covered in just one of the meetings were complementary feeding, the recommended six food groups, the seven essential nutrition actions, iron/folic acid for anemia, maternal nutrition, danger signs for maternal and neonatal health, and family planning. The average duration of the meetings was a half hour with 25 participants, of whom about 20% were men.

The venue for these meetings was adequate in most cases, with the exception of noise and other distractions found at most. The average score for the facilitators' communication skills on a 100-point scale was 59%. In most cases the key points of the presentation were not summarized at the end. The audience was found to be bored and restless at half of the meetings. A good tactic for increasing audience participation observed at several talks by facilitators was having the audience sing songs on health and nutrition topics.

A general observation is that straw mats would be a useful addition to cover the ground where we people sit and infants crawl at these meetings. Perhaps the community could provide these. Few mats were observed, and instead children were crawling in and eating dirt at these meetings, increasing their risk of getting diarrhea from this lack of hygiene.

b. Counseling

The facilitators' counseling skills observed during home visits have already been reported in **Table 9** under home visits. Similar gaps in counseling skills were observed in the few HSAs who did counseling at outreach clinics. In exit interviews with twelve mothers at these clinics, only one said she had learned something new. More focus was placed on breastfeeding during counseling than on complementary feeding, despite that fact that the period of greatest nutritional vulnerability and inadequate weight gain seen in the growth charts examined in the assessment was during the complementary feeding period from 6-24 months of age. While some workers were using their Community ENA Program training manual as a job aide during counseling and others used a chart of the six food groups, there was a dearth of adequate IYCF counseling materials for the program.

c. Cooking Demonstrations

Cooking demonstrations held in the community and less frequently at health centers are one of the principal nutrition education strategies used to improve complementary feeding practices in the Community ENA Program. Nutritious local foods are donated by community members and cooked by facilitators and participating mothers and fathers

(mainly mothers). The main objective is to demonstrate how to enrich the plain maize meal porridge used as a weaning food by adding other nutritious, locally available foods to it (such as crushed groundnuts, pulverized dried fish, dark green leafy vegetables, or oil) to increase its energy density, protein, Vitamin and mineral content. Including all six food groups to diversify the child's diet is a key message.⁶ The demonstrations also serve to stress the basic principles of appropriate complementary feeding referred to by the acronym FADUA, i.e. frequency, amount, density and diversity, utilization of food (hygiene), and active feeding. Several cooking demonstrations were observed during the assessment and they were mentioned frequently by respondents as one of the approaches used.

While the idea of educating through cooking demonstrations is a good one, the assessment team was concerned that these were going forward without BASICS having standardized the recipes, measuring devices and serving sizes to deliver the daily nutrient requirements of children from complementary foods in addition to the nutrients obtained from breast milk. This is necessary in order to explain to mothers or caregivers how to be sure that they are feeding the right amount (how many spoonfuls, how many bowls or cups, what size bowl, etc.) and achieving the desired energy density of the porridge (how much dry ingredient to mix with how much water, and adding oil). The planned section of the training manual on "Food Preparation and Measurements (Recipes)" has not been written yet. The WHO recommended daily energy/caloric intake in addition to breastfeeding increases with age, namely 200 kcal/day for infants 6-8 months; 300 kcal/day for infants 9-11 months; and 550 kcal/day for children 12-23 months⁷. Similar programs in other countries have found it useful to promote/provide a feeding bowl for use just by the weaning age child, with measurement calibrations to make it easier to estimate the increasing amounts of porridge needed with age. Another potential hazard at the cooking demonstrations is that cooked food left sitting out at ambient temperature for an extended time could become an excellent medium for diarrhea-causing bacteria to multiply. Such food offered to young children at the demonstration could cause diarrhea when consumed. There is a need to stress taking precautions to assure that the cooked foods are served immediately and not stored.

d. Counseling Corners at Health Centers

Another program innovation for nutrition education observed in the assessment was counseling done at the Bimbi and Phalombe health centers. Pregnant women or mothers of children less than two years of age, who were attending health services, were channeled to counseling corners for advice on the seven ENA practices, as well as proper infant feeding practices for PMTCT for HIV positive mothers. At the Phalombe health center the counseling was being done by two HTC counselors paid by BASICS, whereas at the Bimbi health center in Zomba, the counseling was being done by volunteer facilitators. The program had organized separate stations or corners for pregnancy, 0-6 months, 6-24 months. At the Bimbi health center, there were also corners for weighing/growth promotion, feeding the sick child, and a cooking demonstration on preparing complementary foods. While these two health centers had enough room and counselors to have these separate spaces for counseling people with different needs, sufficient space/ and workers might be a constraint to scaling up this approach elsewhere. It has been effective and efficient in similar programs to just have one counseling station where individual mothers receive one- on-one interpersonal counseling by counselors who

⁶ The six food groups are staples, legumes and nuts, green leafy and yellow vegetables, animal foods, fruits, fats and substitutes.

⁷ Pan American Health Organization, World Health Organization, "Guiding Principles of Complementary Feeding of the Breastfed Child," 2003.

are knowledgeable on the key nutrition messages across the continuum from pregnancy through two years, and who use different job aides or counseling cards for each specific group or need.

Some gaps noted in the key messages posted on the wall at the Phalombe health center counseling centers were the absence of recommendations on iron/folic acid supplements for pregnant women, and preparing for birth and breastfeeding by having front opening clothing ready for the mother. There was no recommendation on Vitamin A supplementation for postnatal women in the first eight weeks after delivery or for children 6-24 months. At the Bimbi health center counseling station on growth promotion, they were also planning to measure weight for height routinely, when weight for age is the norm, unless children are acutely malnourished and need more detailed screening, than the MUAC measurement will provide. For counseling mothers, these two very different measurements could be quite confusing.

The program is promoting the concept of making health centers ENA-friendly, adapting the idea from the successful Baby Friendly Hospital Initiative's ten steps to promote early and exclusive breastfeeding. This is consistent with the overall ENA approach which strives to both improve nutrition services at health facilities and in the community. However, the assessment team found that though the Bimbi health center was being showcased as ENA-friendly because of its nutrition counseling corners, it was not ENA-friendly, because of stock outs of iron, Vitamin A, health passports/growth charts and too few (five) weighing scales to cover the 52 villages it serves. While the program's main focus should continue to be preventive behavior change interventions in the community, as time and resources permit, it would also be worthwhile to put in place quality assurance performance standards addressing the seven essential nutrition actions at all health centers that serve the program villages.

7. Growth Monitoring and Promotion

a. By Facilitators in the Village

The assessment team was able to observe monthly growth monitoring and promotion sessions conducted by facilitators in two different program villages in Phalombe district. These were held at one spot for the whole village with all the facilitators from that village present to help. Large numbers of children 2-5 years of age attended these, creating extra work and distracting the focus from the more vulnerable children under two years. Only a couple of fathers were seen at these sessions, with the rest leaving this chore for the mothers. The session began with a health or nutrition talk by one of the facilitators and mothers singing songs on health topics. A cooking demonstration was observed at one of the sessions.

The sessions were well organized, with tasks divided up among the facilitators, e.g. a weighing station, a plotting station, and counseling stations. While observing the interpersonal counseling with mothers of children who were not gaining adequate weight, facilitators were heard: 1) planning to do a home visit; 2) referring the mother and child to the health center, or 3) telling the mother to attend a cooking demonstration. However, it was much less frequent to hear the facilitator really discussing the current feeding practices with the mother and offering actionable advice that the mother could put into use immediately. Thus, solutions were being deferred till later, instead of seizing the moment for some good counseling on the spot. Mothers may not act on the referral, the home visit may not be made, the cooking demonstration is a general event, not specific to the

individual mother's problems, and the health center may be no better equipped to deal with feeding advice than the facilitator.

Another observation in reviewing the growth charts of the facilitators' own children from 6-24 months of age was that many were not growing well. The facilitators need to be successful first in using the improved feeding practices and demonstrating that their children are growing adequately. They need to be role models. Otherwise it will be very difficult for them to convince anyone else to try the new behaviors.

b. At HSA Outreach Clinics for Under Fives

The assessment team had the opportunity to observe growth monitoring and promotion activities at three scheduled outreach clinics, two serving program villages in Zomba district and one serving control villages in Phalombe district. Several HSAs work together in assembly line fashion to conduct the mobile outreach clinics for children under five years of age. The outreach clinics are held under a tree or in a borrowed building closer to where people live, reducing the distance barrier to accessing services at the health center. Services provided include growth monitoring, immunization and screening and referral for illness. Each outreach clinic covers several villages, such that all villages served by the health center are covered once a month.

Weighing and plotting of growth charts was mainly done by volunteers who assisted the HSAs at the outreach clinics. In program villages these volunteers were some of the facilitators. However, the assessment team was surprised to observe similar volunteers assisting with weighing in the outreach clinic in the control area. The team was informed that having volunteers, selected by the community, assist with weighing is the norm at outreach clinics. In control villages, these volunteers do not perform any other nutrition duties beyond helping at the outreach clinics, unlike the facilitators in the program area who make home visits and give health and nutrition talks. The work of the volunteers at the outreach clinic focused on weighing and plotting the weight on the growth chart. Different people did each of these steps and mothers were either given slips of paper with the child's weight or asked to memorize the child's weight and then asked at the next station to tell the child's weight to the person plotting it on the growth chart. This disconnected process may have led to errors in plotting the right weight of the child on the right chart. In any case, all of the volunteers' attention was focused on this, the growth *monitoring* aspect, and little attention was paid to counseling the mother on whether the child had gained weight or to giving appropriate feeding advice, i.e. the critical growth *promotion* aspect.

It is well established that growth monitoring alone without growth promotion is ineffective in improving weight gain and nutritional status. Limited nutrition counseling was done by the HSAs themselves. Only four of those interviewed reported doing individual counseling themselves, the rest rely on volunteers or facilitators to do the counseling. In exit interviews with 13 mothers, half of them reported receiving advice on the weight of the child and IYCF practices. However, only one of these mothers reported that she had learned anything new. Four mothers said that the HSA had discussed family planning and three reported that the HSA had mentioned to them the importance of knowing their HIV status. There was no counseling being done by anyone in the case of the outreach clinic in the control area.

In addition to not doing behavior change counseling to improve IYCF practices, another major problem observed at the outreach clinics was the inaccurate classification of children's "Growth Status" as "normal" or "under weight" and the recording of this

information by the HSAs in the under one and under five registers. As discussed later in this report in the section on registers, the HSAs were classifying nearly all children as normal and very few as under weight, nowhere near the 27-31% of children found in the assessment to not be gaining adequate weight (**Table 5**). This was happening in part because the HSAs were just entering the weights in the register without reviewing the growth chart to make a growth status determination of normal or under weight. Instead, their main focus was on immunization and screening for illness. Thus, these outreach clinics were a huge missed opportunity for preventing malnutrition by detecting growth faltering early and effectively counseling the mother or caregiver to improve IYCF practices or address infections. Mothers' and children's high attendance at these clinics was fruitless in terms of any positive nutritional outcome. It is possible that given the great attention paid to screening for and treating SAM in Malawi versus prevention through early detection of growth faltering, that the HSAs may consider all children's weights "normal" unless they are suffering from SAM.

c. General Findings on Growth Monitoring and Promotion

Several errors in weighing and plotting techniques were observed. One was hanging the weighing scale too low or too high, and not at eye level. In one village this was due to not having rope for hanging the scale, and using a *chitenje* (sarong) instead that was too short. This same error of hanging scales too low was commonly seen in markets where grains were weighed. The scales do not come with any pants for hanging the children so they use the *chitenje* as a sling to hold the child instead. This is a good practical solution, but some workers were forgetting to zero the scale with a *chitenje* hanging from it, before starting the weighing session, in order to remove the weight of this sling. Furthermore, children are not undressed for weighing, so the scales should be zeroed at the start of the session with both the *chitenje* cloth and a sample set of typical children's clothes hung from the scale to remove the weight of these items before weighing children. This practice of zeroing the scale properly was not observed. Workers or caregivers holding agitated children during weighing in order to stabilize them also caused incorrect weight readings. Not connecting the weight dots or plots on the growth chart in order to see the growth curve was a very common error. Some workers had not correctly filled the months of the year on the growth chart starting with the month of birth, leading to weights being plotted out of line with the child's current age.

As mentioned earlier, if the child did not have a health passport with the growth chart and was using a notebook in which serial weights were listed, it was difficult, if not impossible, to assess the adequacy of weight gain.

There is also a need to train facilitators and HSAs to probe deeper into the causes of repeated failure to gain adequate weight for several consecutive months. This failure to grow could serve as a red flag for possible underlying illness that needs to be treated, such as persistent diarrhea, malaria or HIV. Such children should be referred to health services.

Mother's suggestions on how to improve the growth monitoring and promotion activities shared with the interviewers during home visit interviews are seen in **Table 11**. Many mothers were satisfied with the program. For the few who made suggestions, the main requests were for permanently installing outreach services and having buildings for the activities that are currently mobile and often held outdoors under a tree. A few mothers would also like facilitators to have basic medicines they can dispense for sick children.

Table 11 Mothers' Suggestions for Improving Growth Monitoring and Promotion

Mothers' Suggestions	N=28	Number of Responses
Everything is okay		12
Improve by permanently installing outreach clinics, including immunization services, versus mobile monthly clinics		4
We need shelters for carrying out the activities, because sometimes we fail due to rain		4
Facilitators should carry with them drugs for common medicines to treat sick children		3
Include other topics such as hygiene, Family Planning, HIV/AIDS		2
Provide weighing scales		2
Make health passports available so we don't have to use notebooks		1
Provide supplementary foods when children are malnourished		1
There should be incentives for those whose children are growing well		1
Need drama groups to teach and entertain		1
Encourage parents to bring their children for growth promotion		1
More health and nutrition education		1

8. Monitoring and Evaluation

a. Health Center and HSA Registers

i. Under One Children Register

The review team found several problems with the design of the Under One Children Register being used nationally for infants less than one year who attend outreach clinics or the health center, which make it difficult for the HSAs to track if children are gaining adequate weight, and, if not, to prioritize counseling and home visits to improve feeding practices or address illness. One problem is that the register is kept for the entire health center, and not for each village or each HSA's catchment area. In the case of Bimbi health center there are 52 villages covered by the register. Every time a child attends his/her information for the current visit is written on a different page in the order in which he/she was served, so there is no way to readily compare weight for the previous visit with the current visit to determine if gain is adequate. Birth date name and address of the child are entered only once, on their first visit to the health center. After that all that appears is the serial number from the health passport. Children from different villages are all mixed together on the same page in the order in which they were served that day.

Children attending are weighed and weights plotted on growth charts. The register has two columns for growth status - one for normal weight and one for underweight. The HSAs filling the register were entering the weight of nearly every child in the normal column at the Bimbi health center, because they were not reviewing the growth curve on the child's health passport to determine if weight gain was normal. Secondly, because sequential

visits by children are not entered next to each other in the register, it is not possible in looking at the register to easily find the previous weight of the child to assess adequacy of weight gain. Malawi has high rates of malnutrition and the review team observed that many children's growth charts evidenced growth faltering, starting around six months of age. Therefore, it is not credible that nearly all the children are classified as normal weight by the HSAs. Of 429 infants under one attended by and entered in the register of the Bimbi health center in June 2009, only 9 were classified as underweight or 2%. The same problem of classifying nearly all children's weight as normal was observed when reviewing the registers for the month of January 2008 at the Kawale health center in Lilongwe during the pre-test for the assessment conducted in July 2009.

ii. Under Five Children Register

This register is for children 12-29 months of age. As observed for under ones, nearly all children's weights were classified as normal in the under five register at the Bimbi health center in June 2009 and at the Kawale health center in November 2008. Of 836 children entered in the Bimbi register in June 2009, only 29 were classified as underweight or 3%. Furthermore, this register has even more serious limitations than the under one register. This is because children are entered only as an anonymous tally mark in the normal or under weight categories for the age groupings of 12-23, 24-35, 36-47, and 48-59 months. There is no identifying information whatsoever to enable follow-up and home visits, nor is it possible to compare weight to the previous month to see if the child has gained enough from one visit to the next. This may be less serious for children 24 months of age or older who are beyond the age when preventive malnutrition interventions can have their biggest impact. However, it is a flawed approach for children 12-23 months of age for whom health providers should be focusing on their weight gain and proactive intervention through counseling and home visits, when inadequate weight gain is observed. Furthermore, the tally marks are for the whole health center and not just for children from the village(s) of the HSA's catchment area.

One conclusion, after reviewing the above health center registers is that a Village Health Register is urgently needed. The assessment team understands that the MOH is planning to introduce a Village Health Register.

iii. Antenatal Register

The assessment team quickly reviewed the antenatal register at the Bimbi health center. A limitation is that date of last menstrual period (LMP) and Expected Date of Delivery (EDD) are not recorded. The facilitators and HSAs are also not recording this information, so it makes it difficult to do home visits for follow-up close to the date of delivery and for early newborn care. Furthermore, in the health center register it is not possible to record sequential antenatal visits by the same woman in the same place in the register to compare weight gain and other trends as the pregnancy progresses.

There is also an individual "Health Passport Woman Health Profile" that women keep with information on medical history, obstetric history/risk factors, antenatal consultation records with serial weights, hemoglobin, tetanus toxoid immunization, iron supplements and anemia symptoms, malaria prevention (SP), transport plan for safe delivery, summary of delivery, tuberculosis medication, family planning and a breastfeeding/child spacing checklist.

b. Facilitator's Registers

The facilitators prepare individual records for pregnant and postnatal women, and children 0-6, 6-24, and 25-59 months of age in all households registered in the catchment area. Information on availability of latrines, clean water and garbage disposal are also noted. These individual records are not consolidated into a register. All but one facilitator were able to show these records to the interviewers. Nearly all facilitators interviewed (80%) were keeping these records up to date when they learned of new vital events, with only two reporting that they had waited more than two months to make updates.

c. Key Indicators

The 31 indicators used by the HSA and others for monitoring performance of facilitators and the Community ENA program are found in **Annex 2**. The facilitators in each village meet with the HSA to prepare a group report for the village. The group village report masks performance by individual facilitators.

All of the indicators are numbers, and most are output indicators. There are a few indicators that could become useful for monitoring and evaluating outcomes, if they were presented as percentages with numerators and denominators and not just numerators, e.g. pregnant women referred to antenatal care in the first trimester, postnatal women with institutional deliveries, and children with static or decreasing weights this month. There was little evidence that the indicators were being used to actively manage the program at any level.

The HSA sends the report to the health center, which in turn sends it to the District Coordinators. The most recent report provided by the BASICS Community Liaison Officer for Zomba to the review team was for April 2009. It was not consolidated for the district, but presented as individual village reports. There were no reports from three of the twelve program villages, namely Bimbi, Chipengule, and Chapola. For Phalombe district, the BASICS District Coordinator provided the review team with a blank copy of the same indicator spread sheet used by Zomba, but no facilitator performance data were available.

The biggest gap found is that the program is not using the four standard, proven indicators used in other GMP programs to monitor and evaluate whether the program is having an impact on increasing weight gain of children.⁸ These indicators, usually presented as bar graphs, measure monthly the percent of all registered children under two years of age 1) that are weighed, and 2) have gained adequate weight. The goal is 100% for each. The remaining two indicators are the percent of children weighed that 3) have not gained adequate weight (inadequate growth), and 4) have not gained adequate weight this month and the last month (inadequate growth for two consecutive months). The denominator for indicators 2, 3, and 4 above is the number of children weighed in the current month minus those children for whom weight gain cannot be determined because there is no weight available for the previous month from which to determine the growth trend.

The early stage of development of the Community ENA program's monitoring and evaluation system is an opportunity to introduce these new indicators, without having to undo a deeply entrenched system with other indicators. Furthermore, given the limitation of the health centers' registers discussed above, it will be easier and faster to introduce a new improved village level register focused on weight gain in children under two for use

⁸ For example in Ghana, Uganda, Indonesia, Guatemala and Honduras.

by both the facilitator and the HSA, than to change the national registers used by health centers.

It was disturbing to see in the monthly village-level reports by facilitators that they were reporting that there was no malnutrition in their village, similar to the HSAs reporting nearly all children as normal weight in their registers. It is clear that neither the facilitators nor the HSAs clearly understand that growth faltering is malnutrition. Perhaps they both are confused by greater attention paid to detecting and treating severe acute malnutrition and lulled into a false sense of confidence that the rest of the children are normal. The fact that there are no program monitoring indicators on the percentage of children gaining adequate weight, reinforces this lack of understanding that not gaining adequate weight in the first two years of life is the beginning of malnutrition, that if neglected and allowed to continue will proceed to become more severe. This growth faltering should be considered as malnutrition and a trigger for action and reported as such. The program should have an impact on lowering the prevalence of growth faltering, by detecting and reversing failure to gain weight early, and thereby preventing more serious undernutrition.

9. Supplies and Equipment

a. Weighing Scales, Height Boards, MUAC Tapes

In Phalombe every two program villages were sharing one scale but it seemed to be a workable arrangement. However, in Zomba, the Bimbi health center has only 5 functioning weighing scales for 52 villages, one of which must remain at the health center. The remaining four weighing scales are too few for all the villages to share and the assessment team heard a number of complaints from affected facilitators and villagers, that this is not working well. According to the BASICS office in Lilongwe, BASICS procured scales for the program and they have arrived in Malawi and cleared customs, but are still in Lilongwe. They should be supplied to the program villages as soon as possible, ideally at a ratio of one scale per village.

The availability of height boards, and MUAC tapes for use by HSAs was also measured during the assessment. These are not essential supplies for growth monitoring and promotion, which relies on weighing as a more reliable indicator. However, MUAC tapes are needed for screening of severely malnourished children to determine if they are suffering from severe acute malnutrition (SAM) with an arm circumference less than 11 centimeters, in which case they should be enrolled in CTC. Seven of the ten HSAs interviewed had MUAC tapes. Similarly for suspected cases of SAM, a height board can be used at the health center to measure children's height in addition to weighing them. The adequacy of the child's weight for height can then be determined by checking reference tables to see if it is below -3 SD of the reference standard median, i.e. the child has SAM. Only two of the ten HSAs had access to height boards, and they rely more on the MUAC tapes.

b. Health Passports with Growth Charts

In addition to having the essential weight for age growth chart, child health passports also include useful nutrition and health education messages on exclusive breastfeeding, complementary feeding from 6-12 months and complementary feeding from 12-24 months, the six recommended food groups, and the importance of taking the child to the health center or hospital if sick. The review team was told that families have to pay 20-50 Kwachas (US \$ 0.12—0.31) for each health passport, with the price varying by location

and person asked. The BASICS District Coordinator in Phalombe was concerned to hear that there was a variation in price and said the lower price should prevail everywhere.

The reasons given by mothers for not having a health passport for their children are shown in **Table 5**. The cost was the reason given for the child not having a passport by 10% of the mother's interviewed in both program and control areas. However, in program villages, the most common reason mentioned was that the passport had been lost (38%), followed by 24% who did not have health passports because they were out of stock at the health center. In the control villages the main reason stated by 60% of the mothers for not having a health passport was that these were out of stock at the health center. During the review, the team was indeed able to confirm at the Bimbi health center in Zomba district that passports had been out of stock for some time. The Medical Assistant in charge of the health center said they had experienced difficulty getting the health passports from the DHO, because only one person managed this and they had found that person out of the office when they sent someone to collect a re-supply of passports. Four of the ten HSAs interviewed also said health passports were not available. These obstacles need to be resolved through follow-up with the DHO.

One reason mentioned at the central level for why health passports may be out of stock is that the MOH is revising the growth chart to incorporate the new WHO weight for age reference standards. They may not want to print the old version if the new version is to be released soon. However, this was not the reason given at district level.

c. Registers – Hard Covers

The USAID/BASICS program has supplied facilitators with blank, hard cover registers to use for their recordkeeping. The workers then fill in the column headings by hand and keep their records. Some community leaders and facilitators complained that the initial stock had been filled up and they needed new ones. No clear system for ordering and re-supplying these was in place.

10. Sustainability Plans and Donor Interest

All but one of the eleven DHMT respondents said that districts have plans for sustaining the Community ENA Program. A key design feature of the program that favors institutional sustainability is that the health workers used in the program (HSAs) are employees of the government who can continue community activities as part of their regular duties. Furthermore, the districts are including activities for the Community ENA Program in the District Implementation Plans (DIP), such as supervision, transport if fuel is available, home visits by HSAs with bicycles, training of health workers on ENA and review meetings. Some of these activities would continue to be done without external support.

Other factors favoring sustainability are the empowering of communities to take ownership of the program. However, more involvement of other partners and stakeholders in the district and encouraging them to implement the same activities in their operational areas could advance sustainability more. When asked whether other donors are interested in working on the Community ENA Program, the DHMT respondents said they had not yet sensitized other donors to Community ENA, since the program is still in the pilot stage. However it was expressed that involvement of other NGOs is often a challenge because each NGO comes to the district with its own planned activities.

E. Attitudes and Perceptions about the Program

1. District Health Management Team (DHMT)

All DHMT members expressed a positive attitude towards the program. They felt ownership for the program because they had been involved in all steps of programming, implementation, monitoring and in the current progress review. They highlighted their involvement in identification of the priority health and nutrition problems of women and children to address, selection of intervention villages, planning meetings with village heads and HSAs, selection of facilitators to be trained and the whole capacity building process.

The DHMT members interviewed perceived the Community ENA Program as of great benefit to women of child bearing age and children less than five years of age. They had also observed spillover benefits to other family members. They consider the most important strengths of the program to be: community members themselves implementing the program who know the local situation and “own” the program; facilitators filling in the gaps for HSAs, especially making home visits; facilitators empowered and given a voice to speak for their fellow villagers; and local foods being used to teach mothers how to better feed their children with available resources. The Community ENA Program has improved the relationship between the health center and the surrounding communities. Stigma in PMTCT efforts is diminishing due to the program.

2. Facilitators

Two focus group discussions were held with facilitators from program villages in each district for a total of four. The separate report on the results of these discussions should be consulted for more details. The facilitators' perceptions are summarized here. Most facilitators are of the view that promotion of better maternal and child health and nutrition through community-based facilitators is a suitable and effective strategy. They consider this strategy appropriate because the community can easily believe that the messages facilitators are carrying are trustworthy and need to be adhered to. The facilitators also think that the other point in favor of this strategy is that the people disseminating the messages are selected from the village and reside there. The facilitators can easily be contacted for advice and assistance as compared to health surveillance assistants who commute from outside the village. The facilitators can visit the households more frequently than the health surveillance assistants and this builds trust in the people visited. The facilitators reported that they make an average of two visits per month to homes of the target population. The other merit of using this strategy is that people are more open to the message the volunteers bring, than is the case with the health surveillance assistants.

The facilitators think that the program has changed people's mindset and increased their knowledge. The use of locally bred nutrition and health educators as channels of communication has effectively dispelled some of the beliefs, traditions, misconceptions and habits that negatively influenced the health and nutrition status of the community, particularly that of pregnant women and lactating women and young children.

When asked what they need to improve their work as volunteers for the Community ENA Program, most facilitators said they want uniforms. Some also said they would like training on HIV, and one requested a bicycle ambulance for the community. None complained about not receiving a salary for their work. BASICS has plans to provide the facilitators soon with uniforms, tote bags and umbrellas with a logo for the program

showing a father spoon feeding complementary food to his child with the mother contently watching.

3. Village Head Men and Women

The program's strategy of actively involving community leaders has been very effective for community mobilization and promoting local ownership. The ten community leaders interviewed expressed very favorable impressions about the Community ENA Program. Their impressions are that due to the work of the facilitators there are: a) fewer maternal, newborn, and child deaths, b) less severe malnutrition –kwashiorkor and marasmus, c) more health referrals, d) increased and earlier ANC attendance, and e) increased institutional deliveries with less fear of health facilities.

Some notable quotes are the following:

"I am also at peace because earlier, every time there was a knock on my door it would either be illness or death of a child, mother or problems with delivery but now when I hear a knock it is "milandu" or some people have beaten each other at the pub."

"This organization has assisted us tremendously, I comment on how it has helped me as an individual, I have twin babies under age of 2. When they were born I managed them well but last year one of the two fell ill such that I almost lost her but for what these facilitators did to help the baby., I tell you the baby is well and people learnt a lesson that when they have a problem they rush to the facilitators to get a referral letter to the health facility."

Probe: *"What was the problem that your child faced?"*

Response: *"The problem was malnutrition, she was showing signs of marasmus such that when they started guiding us on what to do Ah! things improved for the better. So I just thank this organization that we would have lost her but we have managed to save my daughter."*

"Malnutrition was perceived to be a spell that somebody has casted on a child but now people are able to know that the problem is due to dehydration, food shortages and diseases."

The community leaders were clearly in favor of increasing male involvement to solve maternal and child health and nutrition issues and proactively promoted this change. They thought the men should help the women more as women are over-worked and that this change was starting to happen. Men need to encourage their wives to go to the clinics- outreach for under fives and antenatal. Men should also accompany their wives to these clinics to know what problems the wife has. Men need to prepare for the coming of the baby during the pregnancy, especially for safe delivery, as labor may start with little warning.

“I encourage men to participate and so do the clinics. There is a strategy that every woman that the facilitators find pregnant is advised to go to the clinic in good time. She has to go with her husband. If she doesn’t, the people at the clinic take her chief’s name and tell her to come back with her husband and if she does not return in 3 days the clinicians write to me informing me and I visit the person and make sure she attends the clinic and all pregnant women are to report to me of their pregnancy or else have a case to answer.”

“Cooking demonstrations make men to be able to cook right food for the children when the mothers are busy or are out to business.”

4. Men and Women

Two focus group discussions were held with men and two with women from the program villages in each district for a total of eight focus group discussions. The separate report on the results of these discussions should be consulted for more details.

a. Perceptions about the Program

Men and women from the program villages shared the same favorable impressions of the program as the facilitators. To underscore the value they have attached to the strategy most men and women emphasized the observation that before the groups were established there were a lot of problems in the community. There were high numbers of maternal and infant deaths and rampant malnutrition but the picture has currently changed. The quote below demonstrates that the presence of facilitators has made an impact;

*“Facilitators of MFSG were previously ignored and despised by men but now they are being invited to visit their homes for more pieces of advice and cooking demonstrations. This has been influenced by our facilitator. **Fathers FGD Gomba Village Zomba.***

b. Knowledge and Attitudes about Maternal Health and Nutrition, Infant and Young Child Feeding, and Family Planning

Pregnancy- The program is promoting that the first visit for antenatal care (ANC) occur by the third month of pregnancy. Participants knew the benefits of starting ANC early. However, several reasons were given for not revealing one’s pregnancy early, including fear of witchcraft, embarrassment over not achieving the recommended three years spacing between pregnancies, being an unwed woman or sexual promiscuity. Women also don’t want to attend ANC early because it means they will have to make more visits and they find these visits inconvenient.

The group discussions also revealed that the community members are conversant about the need for pregnant mothers to have well balanced diets. Perceptions of the amount of work pregnant mothers are supposed to engage in was another interesting issue that both mothers and fathers considered important. The key determinant was the stage of the pregnancy. Women that are pregnant cannot be exempted completely from working, but should reduce their workload, through help from the husband, from the seventh month of pregnancy.

Breastfeeding- The mothers and fathers expressed wide knowledge on exclusive breastfeeding. Of particular interest is the clarity with which they explained the importance of giving colostrum to newborns and starting breastfeeding within one half hour of delivery. It appears from the discussion that at this has been a revelation in most communities against what was previously emphasized by culture. Both male and female participants spontaneously indicated that this yellow milk is a first vaccine or immunization for the baby and that it contains antibodies to enable the child to fight off a number of diseases. However, there was misinformation about colostrum in a group discussion with men in Zomba who claimed that it is also useful for family planning.

“It is also a method of family planning for the first six months no matter how much you play with your wife” **Fathers FGD Bimbi Village, Zomba.**

Both mothers and fathers in the intervention sites also demonstrated knowledge that children need to be breastfed for the first two years of their life. It was expressed strongly that children have to be breastfed exclusively for the first 6 months unless the child is ill and requires some medication. Otherwise the mother needs to make sure that only breast milk is frequently made available when the child wants it. The other interesting evidence of people's knowledge of breastfeeding was the sitting position the woman has to assume during breastfeeding which was even demonstrated in a male focus group discussion. The explanation included the attachment the mother and the child should have and even evidence from the swallowing of the child which demonstrates that the sitting position and the way the child is suckling are appropriate.

Complementary feeding- Men and women are knowledgeable that after six months of sole provision of breast milk, mothers should introduce other foods, especially enriched porridge. Among the items popularly considered nutritious for the young child are eggs, groundnuts, vegetables, cooking oil, fruits and meat. These supplementary foods need to be prepared and mixed with the porridge to make it rich in nutrients. However, both men and women confessed that despite having this information not all these items can be afforded by most families in the community. However, it was mentioned that there are special circumstances where a mother may not be able to breastfeed her child for the entire 2 years. If the mother is HIV positive, then she has to breastfeed her child only for the first six months of life and from the seventh month completely rule out breastfeeding and concentrate on provision of other well balanced foods.

In line with complementary feeding, the mothers and fathers expressed knowledge about the causes and indications of malnutrition among children. In most cases, malnourished children are believed to be deficient in the six food groups in their bodies. Malnutrition was automatically linked to child spacing and inadequate care of the under fives when the mother conceives earlier than expected and neglects breastfeeding the youngest child due to the next pregnancy. It was also indicated in Zomba that previously when children were identified to receive ready-to-use therapeutic food (**Chiponde**), parents were proud, not knowing what it implied. But due to the intervention they are now aware that it is evidence of poor child feeding practices and irresponsibility on the part of parents.

Growth promotion- One of the strongest influences in the knowledge about nutrition and child growth has been the growth promotion sessions that the facilitators are conducting in their villages. Mothers and fathers have been mobilized to take a closer look at how their children are progressing in life. Parents have developed an interest to read the progress in body weight of their children from the health passports in terms of loss or gain in weight that demonstrates or indicates how well or badly children are fed.

“The growth monitoring activities are going on okay because we are advised properly after weighing the children. Because the growth monitoring sessions are taking place in the community we can still take our children to the session even up to the age of five. But in the past, when sessions were conducted only at the hospital, it was impossible for mothers to continue attending the growth monitoring sessions beyond the last immunisation of the child because of the distance.
[Explanation on the growth curve from a mother]!! **Mothers FGD Lomoliwa Village Phalombe**

Family planning-The biggest complaint of women about lack of male involvement was related to family planning. There was general agreement that spouses do not discuss the number of children they intend to have in their marriage. Instead of planning ahead and using contraceptive methods to achieve a desired family size, couples take their chances and their children arrive by random luck, like a lottery win, as some of the men expressed it. In group discussions with mothers, it was strongly argued that men are not willing to practice family planning at all and those women, based on their experience with child births and the messages they get from the antenatal care sessions, are easily convinced of the importance of family planning. When the men are reluctant to accept the ideas, the women decide unilaterally to adopt a family planning method of their choice. They just sneak out without the consent of the husband. Men are notorious for refusing to practice family planning on the pretext that it lowers women’s libido or that the men become sexually weak if the woman gets an injection or tablets. Despite the reluctance most men have shown in accepting good child spacing and modern family planning methods, a good proportion of men are understanding and have become flexible to family planning matters, particularly through the home visits from facilitators.

In a visit to a growth monitoring and promotion session in another village in Phalombe (not an FGD), the assessment team observed a male facilitator give a talk to mothers on family planning. In the discussion that ensued with mothers after the talk. Several women shared their view that men suffer diminished sexual drive when their wives use Depo-Provera, whereas the wife’s sexual drive increases. Another woman complained about having heavy menstrual bleeding as a side effect of Depo-Provera.

V. CONCLUSIONS

The Community ENA Program is addressing the void in community-based interventions to prevent malnutrition in rural Malawi, by showing that it is feasible to have village volunteer nutrition workers make frequent behavior change contacts with families with women and children in the most vulnerable group from pregnancy through two years of age. Through teamwork between the volunteer facilitators and the HSAs, the program has both responded to the lack of community-based malnutrition prevention efforts, and strengthened the interface between the community and facility-based health services. Additional achievements are mobilizing communities, promoting local ownership, and engaging the village heads. Furthermore, the program has tackled the difficult task of getting men involved, and succeeded in measurably increasing husbands' assistance to reduce the heavy workload of their wives in pregnancy and lactation, overcoming considerable traditional cultural resistance to do so. All of these successful strategies and achievements provide a solid platform for addressing the major remaining challenge of doing effective growth monitoring and promotion.

The main conclusions drawn from the findings of the assessment of the USAID/BASICS' Community ENA Program in Malawi are summarized below.

Impact:

- *Nutritional status* - The program has not had an impact on improving children's nutritional status or growth trends. This is not surprising given that gaps were found in a number of components necessary for a successful growth monitoring and promotion program. Furthermore, the program had been underway for less than a year in a number of the communities, and that is too short a period to expect major improvements in nutritional status. The most significant nutritional problem found was the failure of children to gain adequate weight from 6-24 months of age or growth faltering. This is due to inadequate complementary feeding and infection.
- *Use of health services* - There is a trend toward increased early attendance at antenatal care in the program villages, though this is not statistically significant. No impact was found on increasing institutional deliveries or immunization coverage.
- *Home visits* - The program has dramatically increased the frequency of home visits through having volunteer facilitators in the villages, who assist the lowest level, paid community health worker, the Health Surveillance Assistant (HSA).
- *Male involvement* - There has been a significant increase in men's involvement assisting their wives to reduce workload in pregnancy and lactation due to the program's promotion of this.
- *Positive perceptions* – The program is popular at all levels. It has been successful at community mobilization. The village chiefs are actively involved and the sense of local ownership is high.

Program Coverage:

As of July 2009, the program covered 31 villages in Phalombe and Zomba Districts through 261 trained volunteer facilitators serving 4,981 households and 1,617 children less than two years of age, as well as pregnant and lactating women. The number of children under two years served by each facilitator is very low- only six to seven children. This is a costly and inefficient coverage ratio compared to similar programs elsewhere where community volunteers each cover four to thirteen times as many children. The number of households in the village was the unit for determining how many facilitators to have, instead of doing the customary census to identify and count the total target population and using that information to decide on the number of facilitators.

Program Design Concept:

- Though the program has been called the Mother Father Support Group Program, the assessment found that traditional support groups have not been established. Instead of peer-to-peer mutual assistance around shared problems, which is the backbone of support groups, the program has used a more traditional approach to nutrition and health education through talks and cooking demonstrations by facilitators, home visits, and monthly growth monitoring and promotion sessions. The assessment team concluded that the latter approach is more appropriate since the program strives to address a wide array of behaviors across the continuum from pregnancy through the first two years of life and the seven essential nutrition actions. Given the breadth of physiological stages, subject matter, and specific nutrition problems being addressed, the support group approach, which to succeed requires membership of similar people who share the same problem/challenge, e.g. breastfeeding or HIV/AIDS, is not a good fit. It was decided during the assessment that the program should be re-named as the “Community ENA Program” to more accurately describe its focus.
- PMTCT mother support groups were an effective strategy for addressing the special infant feeding challenges of HIV positive mothers and their children in the earlier Umoyo Network Project in Malawi.⁹ Therefore, this would be an appropriate strategy for the Community ENA Program to use with this small sub-group of HIV positive mothers, if the program expands to include a PMTCT component in the future.
- The program’s strategy of having volunteer facilitators who focus on behavior change in the community for improving maternal nutrition, infant and young child feeding, male involvement, and use of health services is a good one. Such volunteer promoters are necessary because the HSAs alone cannot do this work at the intensity required, given their other duties.
- The HSA’s role in the program is not well defined. Having facilitators to help them in some cases resulted in their delegating nutritional responsibilities that are and should remain in their job description.

⁹ USAID/Save the Children, “Umoyo Network-Capacity Building for Quality HIV/AIDS Services Project: Final Report,” November 30, 2007.

Growth Monitoring and Promotion and Behavior Change to Improve Maternal Nutrition and Infant and Young Child Feeding Practices:

- The outreach clinics for under fives are the place where growth monitoring and promotion are done monthly by HSAs according to the official MOH norms. Volunteers/facilitators help with weighing at these clinics. Attendance by mothers with children less than two years of age is high, with immunization services being a big draw. However, there is little diagnosis of inadequate weight gain or effective nutrition counseling taking place. The USAID/BASICS program has not worked to improve the nutritional outcomes of the outreach clinics. These clinics represent a huge missed opportunity for successful encounters with mothers, fathers and caregivers to prevent malnutrition and to work on improving feeding behaviors.
- Weighing sessions done by facilitators in the village appeared to be an unnecessary duplication of effort of those done at the outreach clinics. These attracted children from two to five years of age who are not the priority group for nutritional risk, in addition to the priority group of children under two years, causing extra work for the facilitators.
- Regular monthly attendance at outreach clinics for weighing by mothers and children under two years in control villages was slightly higher (though not significantly so), which only had access to outreach clinics, than in program villages, where facilitators also did weighing in the village. These high attendance rates, even without intervention, are a real asset and make it realistic for the program to strive to achieve the benchmark of at least 80% attendance.
- Counseling skills of HSAs and facilitators to advise mothers on improved feeding practices and address possible infections (including HIV/AIDS) were found to be weak. The absence of any counseling materials or job aides for this purpose made effective counseling even more challenging. The program has focused more on improving breastfeeding practices than on improving complementary feeding practices, whereas the latter is the bigger need.
- Review of growth charts of a few facilitators' children in the 6-24 months age group, revealed that these children were also suffering from growth faltering and that these facilitators had not yet succeeded in improving IYCF feeding practices to achieve adequate growth in their children. Until the facilitators successfully model the recommended behaviors, it will be difficult for them to convince others.
- Neither mothers, nor facilitators, nor HSAs are clear on the “why” and “how” of measuring and monitoring adequate weight gain. The child’s weight gain status for the current month is not used as a starting point to counsel mothers or prioritize home visits. Nearly all children were considered “normal” and not “underweight”, despite the fact that the growth charts of one third of the children from 6-23 months indicated inadequate weight gain. Workers’ weighing, plotting and interpretation skills need strengthening.
- An inadequate number of weighing scales for villages served by the Bimbi health center, and stock outs of health passports/growth charts are obstacles to successful growth monitoring and promotion.

Micronutrient Interventions:

- The three micronutrient essential nutrition actions (control of deficiencies of iodine, Vitamin A, and anemia) are minimally addressed by the program through general advice on dietary improvement, diversification and consuming the six food groups. Because of stock-outs, the health facilities and outreach clinics were not providing supplementation with iron/folic acid to pregnant women, Vitamin A to postpartum women, and Vitamin A every six months to children 6-24 months of age.

Supervision and Program Management:

- Supportive supervision and in-service training of facilitators by HSAs need to be improved. However, program managers need to seriously review if this is feasible given the HSA's many responsibilities and workload. Alternatively, the addition of home craft workers to fill this role, as being considered by the government of Malawi, might be a useful alternative to test.
- Regular meetings of BASICS staff with the DHMT are needed to review program performance.

Monitoring and Evaluation:

- More emphasis is needed on managing for results in the program. The recently introduced monitoring and evaluation system is weak and focused on numerical output indicators (not percentages). Weight gain indicators with numerators and denominators are not used, making it impossible to evaluate results or measure worker performance.
- There are major limitations with both the design and manner in which the HSAs complete the MOH's Antenatal Care Register, Under One Children Register and the Under Five Children Register, used nationally by health centers, in terms of correctly classifying children with inadequate weight gain to catch and prevent malnutrition early, serially tracking pregnant women's and children's weight gain in repeat visits, and using this information to attend women and children at-risk and do follow-up through home visits and attention at the next month's clinic.
- Improved facilitator's registers are needed, which include weight gain indicators and address, in the short-term, some of the limitations of the health center's registers by recording sufficient information to guide attention and follow-up for children at nutritional risk.

VI. RECOMMENDATIONS

Overall strategic approach Program implementation over the next two years should focus on activities to truly improve maternal, infant and young child feeding practices, child growth and nutritional status of under twos. Two components are recommended, with growth promotion and counseling as the core strategy. The first component will build on the presence of the existing facilitators in the 31 demonstration program villages, and strengthen their work as persuasive behavior change counselors. The second component will seize the great missed opportunity of the existing village outreach clinics, and transform the rote growth monitoring done there into quality growth promotion and effective counseling. The result will be successful monthly preventive nutrition encounters for thousands of mothers and children. Improving the quality of the preventive nutrition work done by HSAs and volunteers at the outreach clinics and during community level follow-up appears to be the most realistic strategy for scaling up the program. These high coverage clinics are part of the existing MOH infrastructure. Once the program demonstrates this successful approach to improve growth promotion and counseling, it should steadily expand to introduce these improvements to HSAs and volunteers at additional outreach clinics to achieve large scale coverage.

Short-Term, August 2009- March 2010: Systems Strengthening Phase in 31 Pilot Villages

The following recommendations describe the systems strengthening measures required to make the program fully effective. The demonstration project should run with these improvements in place for several months before it is reviewed again to determine whether it is an effective growth promotion model that should be expanded.

Highest Priority (most urgent):

1. Strengthen Community-based Growth Monitoring and Promotion (GMP) by HSAs and facilitators at outreach clinics and in home visits as follows:
 - a. Provide weighing scales (ideally at the rate of one per village) to all 31 villages in the program area. BASICS procured the scales and they are ready to be distributed. Advocate to DHO in Zomba and Bimbi health center to resolve stock outs of health passports/growth charts.
 - b. Design and print counseling materials for improving maternal and infant and young child feeding practices for use by facilitators and HSAs in GMP sessions in outreach clinics, during cooking demonstrations and home visits, and in the Bimbi and Phalombe health centers. Use results of Trials of Improved Practices (TIPs) for IYCF being done by Bunda College and the Infant and Young Child Nutrition Project, if available in time. Short-term external technical assistance needed.
 - c. Design Monitoring and Evaluation System (revise facilitators' registers and reports by facilitators and HSAs) with the following key indicators for children under two years of age reported monthly: i) percent of registered children weighed, ii) percent of children that gained weight, iii) percent of children that did not gain weight, iv) percent of children that did not gain weight for two consecutive months. The denominator for indicators ii, iii, and iv above is the number of children weighed in the current month minus those children for whom weight gain cannot be determined because there is no weight available for the previous month (s) from

which to determine the growth trend. Increase performance feedback by DHO and BASICS to facilitators and HSAs.

- d. Orient stakeholders at central and district level to get their input on the design of proposed tools and approaches in the above recommendations, and their buy-in for introducing them.
 - e. Provide in-service, on-site refresher training to all facilitators and HSAs in the program area on using the new tools and implementing the changes to strengthen the program.
2. Identify and put in place short-term external technical assistance by one consultant who can provide continuous support over the next two years. In addition to specific tasks and visits for preparing counseling materials and reviewing the program to inform decisions about an expansion phase, this advisor should be available for virtual consultations for up to four hours per week.
 3. Collect inventory and schedule of existing outreach clinics and volunteers that assist HSAs with growth monitoring in Phalombe and Zomba to identify potential sites and facilitators for an expansion phase.

Medium Priority:

1. Strengthen the Effectiveness of Home Visits by facilitators and HSAs by introducing a planning tool to prioritize visits based on nutritional risk.
2. Strengthen the System for Referrals of patients to health facilities by facilitators, and Counter Referrals to ensure that referred patients receive quality care. Orient health center staff to this new system and seek their full collaboration.
3. Design and introduce supportive supervision by HSAs of the nutrition work of facilitators, and of HSAs by the District Health Office. This includes regular sector meetings at which in-service training can be provided.
4. Advocate with MOH and UNICEF at central and district level for effective provision and administration of micronutrient supplements (Vitamin A and iron/folic acid) to eliminate stock outs.
5. Implement program with all of the above improvements through March 2010.
6. In March 2010, review results of implementation of program improvements, including impact on increasing weight gain using the indicators described in “highest priority” recommendation 1.c. above. If the program is able to demonstrate impact, plan scale up to additional outreach clinics and villages in Phalombe and Zomba districts. Short-term external technical assistance needed.

Long-term Expansion Phase in Phalombe and Zomba (April 2010-June 2011)

1. Revise Community ENA Training Manual for HSAs and Facilitator's Guide to include new tools and changes to the program. Take most of the content from existing HSA and other training manuals. Print and distribute the new manuals during training for the expansion phase.
2. Train new volunteers and HSAs to expand program to cover additional villages and outreach clinics. Do census of the target population and assign volunteer facilitators to each cover at least 25 children less than two years of age.
3. Establish maternal and infant and young child nutrition counseling corners in additional health centers.
4. Use follow-up of all mother–infant pairs across the continuum from pregnancy through two years of age, occurring through GMP and home visits, to better address the special needs of HIV positive mothers and exposed infants for PMTCT, including infant feeding advice.
5. Improve the: a) Under One Children Register and b) Under 5 Children Register used by health centers and HSAs to add a focus on tracking weight gain of children under two years, follow-up and home visits to children at nutritional risk.
6. Carry out policy dialogue with MOH authorities at the central level to persuade them to change the norm of weighing all children under five years of age at outreach clinics, to a new more efficient and better targeted norm of just weighing children under two years of age.

General Recommendations (less urgent)

1. Strengthen coordination with and involvement of non-health sectors, and foster partnerships with other stakeholders present in the program communities.
2. Use drama, songs, dance, poems, or a newsletter to mobilize communities.
3. Launch additional innovative methods to increase male involvement.

ANNEXES

1. List of Participants in the Assessment of the Community Essential Nutrition Actions Program, Malawi
2. Monitoring Indicators Reported Monthly to HSAs per Village by Facilitators in Community ENA Program in Malawi

Annex 1—List of Participants in the Assessment of the Community Essential Nutrition Actions Program, Malawi

Review of Instruments and Methodology

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Technical Advice, Data Collection Supervision and Analysis, Report Preparation

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Mwate Chintu- Community Health and Nutrition Advisor, BASICS (Lilongwe)

Margaret Khonje- Nutrition Officer, BASICS (Lilongwe)

Rudi Thetard, Chief of Party, BASICS (Lilongwe)

**Annex 2—Monitoring Indicators Reported Monthly to HSAs
Per Village by Facilitators in Community ENA Program in Malawi**

Name of village _____ Group village head _____

Number of facilitators _____ Date and Month of reporting _____

Name of Health Center _____ Name of Supervisor (HSA) _____

INDICATOR	
# of households visited	
# of meetings conducted	
# of demonstrations on correct positioning and attachment of baby to breast done	
# of cooking demonstrations on complementary feeding done	
# of women counseled on complementary feeding	
# of growth monitoring activities done	
# of pregnant women identified this month	
# of pregnant women referred for antenatal clinic during the first trimester	
# of pregnant women referred for antenatal clinic after the first trimester	
# of postnatal women identified this month	
# of post natal women with hospital delivery identified this month	
# of post natal women with home delivery identified this month	
# of women referred for family planning services this month	
# of children 0-6 months registered this month	
# of children 6-24 months registered this month	
# of children 0-6 months referred to the HSA or health center	
# of children 6-24 months referred to the HSA or health center	
# of children 24- 59 months referred to the HSA or health center	
# of Children with decreasing body weight identified this month	
# of Children with static body weight identified this month	
# of Children referred for CTC services	
# of mother-baby pair followed up for PMTCT	
# of households with toilets identified this month	
# of households without toilets identified this month	
# of households with rubbish pits identified this month	
# of households without rubbish pits identified this month	
# of households drinking safe water identified this month	
# of households not drinking safe water identified this month	
# of men involved in meetings, demonstrations and growth monitoring activities	
# of active MFSG Facilitators who are active	
# of active MFSG Facilitators who are not active	