



Mwayi wa Moyo (“A Chance to Live”) Project

Blantyre District, Malawi

Year Two Annual Report

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Acronyms and Terms

AEC	Area Executive Committee
ANC	Antenatal Care
BCC	Behavior Change Communication
BLM	<i>Banja la Mtsogolo</i> -Malawian NGO and IPPF Affiliate
CAC	Community Action Cycle
CAG	Community Action Group
CBDA	Community Based Distribution Assistants
CBMNC	Community Based Maternal and Neonatal Care
CCM	Community Case Management
CHAM	Christian Health Association of Malawi
CIDA	Canadian International Development Agency
CM	Community Mobilization
CMT	Community Mobilization Team
COM	College of Medicine
CSHGP	Child Survival and Child Health Program
CYP	Couple Years of Protection
DEC	District Executive Committee
DHMT	District Health Management Team
DHO	District Health Office
DQA	Data Quality Assessment
DRH	Department of Reproductive Health of the Ministry of Health
ECP	Emergency Contraceptive Procedure
FGD	Focus Group Discussion
FP	Family Planning
GVH	Group Village Headman
HBB	Helping Babies Breathe
HC	Health Center
HEU	Health Education Unit
HF	Health Facility
HSA	Health Surveillance Assistant
HTSP	Health Timing and Spacing Practices
ICPTWG	Integrated Community Package Technical Working Group
IMNCH+FP	Integrated Maternal, Newborn, Child Health and Family Planning
IMCI	Integrated Management of Childhood Illnesses
IPPF	International Planned Parenthood Association
IR	Intermediate Result
JSI	John Snow, Inc.
KMC	Kangaroo Mother Care
KPC	Knowledge, Practices, Coverage
LAM	Lactational Amenorrhea Method
LAPM	Long-acting and Permanent Methods
LMIS	Logistics Management Information System
LTFP	Long-term Family Planning
M&E	Monitoring and Evaluation
MNC	Maternal and Newborn Care

MNCH	Maternal Newborn and Child Health
MoH	Ministry of Health
<i>MwM</i>	<i>Mwayi wa Moyo</i> (“A Chance to Live”) Project
NGO	Non-governmental Organization
OR	Operations Research
PHC	Preventive Health Care
PHS	Preventive Health Services
PPFP	Postpartum Family Planning
SBA	Skilled Birth Attendant
SBCC	Social and Behaviour Change Communication
SCI	Save the Children
SHSA	Senior Health Surveillance Assistant
SSDI	Supporting Service Delivery Integration (USAID bi-laterals that include SSDI-Services, SSDI-Policy, SSDI-Communication)
TA	Traditional Authority
TFR	Total Fertility Rate
TOT	Training of Trainers
TWG	Technical Working Group
UNFPA	United Nations Population Fund
UNICEF	United Nations Children’s Fund
USAID	United States Agency for International Development
VHC	Village Health Committee

I. INTRODUCTION, KEY PROGRESS, AND MAIN ACCOMPLISHMENTS

This annual report describes key progress and main accomplishments made in Year II of *Mwayi wa Moyo* (*MwM*). The project accomplished nearly all planned activities for the reporting period. Principal among these was development - with the Ministry of Health (MoH) and partners - of the integrated curriculum and community package for maternal, newborn, and child health (MNCH) and family planning (FP). Despite the OR results yet to come, MoH already decided to adopt this new package at scale, and it is also being used by the USAID Support to Service Delivery Integration-Services (SSDI-Services) bilateral project in its 15 districts. Table 1 below summarizes major Year 2 accomplishments.

Table 1: Summary of Major Year 2 Accomplishments

Project Objective #1: Increased access to and availability of services			
Project Inputs	Activities	Outputs	Outcome (only if survey was conducted)
Trainers, stationery, per diems, accommodation, transport and fuel, training manuals, HBB practice materials, practice dolls, practice area (HF)	Training of 17 skilled birth attendants (SBA) health facility (HF) staff in IMNCH+PPFP	18 HF personnel trained	N/A
Trainers, stationery, per diems, accommodation, transport and fuel, training manuals	Training of 49 HSAs from intervention arm in Module 1 (cross-cutting issues in IMNCH+FP)	50 HSAs trained	N/A
Trainers, stationery, per diems, accommodation, transport and fuel, training manuals, HBB practice materials, practice dolls, practice area (HF)	Training of 49 HSAs in Module 3 (Integrated CBMNC)	48 HSAs and 19 supervisors (nurse-midwives and SHSAs) trained in CBMNC	N/A
Trainers, stationery, per diems, accommodation, transport and fuel, training manuals, HBB practice materials, practice dolls, practice area (HF)	Training of 98 HSAs from both intervention and control arms in CCM for 0-2 months (Module 4: intervention arm)	99 HSAs and 18 supervisors including SHSAs trained	N/A
Trainers, stationery, per diems, accommodation, transport and fuel, training manuals, FP methods, SBCC materials, supervision checklists	Training of 98 HSAs in FP (FP) for both control and intervention (Module 5 for the intervention arm)	99 HSAs, 15 SHSAs and 17 nurse-midwives trained	N/A
Trainers, stationery, per diems, accommodation, transport and fuel, training manuals, HBB practice materials, practice dolls, practice area (HF)	Control area training of 49 HSAs trained in CBMNC	48 HSAs and 16 supervisors (nurse-midwives and SHSAs) trained	N/A
Trainers, stationery, per diems, accommodation, transport and fuel, training manuals, supervisory checklists	Training of 17 SHSAs from the intervention arm in integrated MNCH+FP supervision	15 HSAs and Area Supervisors trained	N/A
Trainers, funds, LMIS and FP data management training materials, stationery, per diems, accommodation, transport and fuel	LMIS and FP data management training for 20 district and HF based staff	35 district, facility-based staff and drug stores clerks trained	N/A
Communication	Facilitate provision of equipment and supplies for trained HSAs in community integrated MNCH+FP package by SC Italy and CCM/CIDA	Salter weighing scales, backpacks, weighing scales, 40 bicycles, drug boxes, respiratory timers, measuring cups and thermometers distributed to 99 HSAs under the <i>MwM</i> as necessary	N/A

Trainers, stationery, training manuals, per diems, accommodation, transport and fuel, FP methods, SBCC materials	Orientation for existing 90 CBDAs on counselling for healthy timing and spacing of pregnancies	95 CBDAs oriented	N/A
Trainers, stationery, per diems, accommodation, transport and fuel, training manuals, SBCC materials, practical area	Training of AEC members/frontline workers from government departments including Senior HSAs in community mobilization (CM) using CAC approach for the intervention arm of the program	44 frontline workers trained	N/A
Trainers, stationery, per diems, accommodation, transport and fuel, training manuals, SBCC materials, practical area	Training of 49 HSAs in CM using CAC approach for the control arm	47 HSAs and 22 Supervisors trained	N/A
Per diems, accommodation, transport	Participated in national TWG on FP, and safe motherhood	Participated in 6 meetings in the reporting period	N/A
<i>MwM</i> staff participation, technical guidance on logistics	Participate in bi-annual OR advisory meetings	One meeting organized by the College of Medicine (COM) to share preliminary results of the baseline that was conducted	N/A
Trainers, stationery, per diems accommodation, transport and fuel	Conduct bi-annual <i>MwM</i> Steering Committee Meetings	One meeting organized by <i>MwM</i>	N/A

II. DISCUSSION OF IMPLEMENTATION ACTIVITIES AND RESULTS

IR-1: Increased access to and availability of services; Integrated training of health workers In October 2012, *MwM* concluded a 21-day training of 18 HF personnel on Integrated Maternal and Newborn Care and Family Planning (IMNC+ FP) from the 17 HFs. Participants included a Medical Assistant and Enrolled Nurses drawn from the Blantyre District Health Office (DHO). Skills included: manual vacuum aspiration, manual removal of the placenta, Helping Babies Breathe (HBB), breech delivery with extended head and arms, and repair of episiotomy.

Training of 49 HSAs and 19 supervisors (nurse-midwives and SHSAs) in the newly developed integrated community-package called *Integrated Maternal, Newborn and Child Health and Postpartum Family Planning (IMNCH and PFP)*. It includes the following modules:

a) Integrated Community-Based Maternal and Newborn Care (CBMNC) which comprises: essential care for pregnant women; essential information necessary for care during labour, delivery and immediately after the birth of the baby, essential care for women and newborn babies during the first week after delivery/or discharge; and the linkages of services within the facility and community. It also teaches how to integrate CBMNC issues in CCM clinics, i.e., identifying pregnant and postnatal women at the clinic and scheduling home visits.

b) CCM for infants 0-2 months When *MwM* started, HSAs had already been trained in CCM for children 2-59 months by Save the Children under a three-year project funded by the Canadian International Development Agency (CIDA). *MwM*, trained all 99 HSAs and 18 SHSAs in CCM for young infants 0-2 months. Those HSAs in the OR intervention arm were also trained on strategies for integrating CCM services during home visits. The 99 HSAs trained in CCM for young infants increased access and availability of care for this group. HSAs now have the capacity to support breastfeeding and assess infants

0-2 months for breathing problems, weight gain, possible infection, diarrhea, and feeding problems and can refer sick young infants to HFs for further management.

c) Family planning for HSAs This module was designed to address the unmet need for FP in Blantyre. The need is higher in rural areas with a high TFR= 5.7 (MDHS 2010) and due to limited access to a wide range of FP methods at the community level and through the public sector. Women have to travel long distances to health centres to access their methods of choice, with an inadequate number of trained health professionals authorized to provide comprehensive FP services. HSAs who are trained, supplied, and supervised can increase access to FP for populations in hard to reach areas. Once trained, HSAs are able to provide DMPA, oral contraceptives, and male and female condoms when necessary. For other methods chosen by the clients, the HSAs will refer clients to a skilled provider. The National FP Desk Officers from the MoH Department of Reproductive Health (DRH) took part in the trainings and selected facilitators. The national Family Planning Coordinator, who is also a trainer of HSAs on FP, was on the facilitation team. A total of 99 HSAs (from intervention sites), along with 15 SHSAs and 17 nurse-midwives (from both integration and control arms) were trained.

d) Cross-cutting issues in MNCH+FP This module looks at issues that cut across the MNCH continuum of care including nutrition and infection prevention. Fifty HSAs from the intervention arm participated in this training with their supervisors.

e) Integrated MNCH+FP community mobilization This training involved 44 members of the Area Executive Committee (AEC) which is comprised of government field workers from different sectors. Members include teachers, community development personnel, District AIDS Committee members, Senior HSAs, Environmental Health Officers, Health Centre In-Charge etc. The purpose of the training was to equip participants with knowledge and skills in CM on MNCH+PPFP issues. These AEC members will then train Community Action Groups (CAG) in CM for MNCH+PPFP. Forty-four (44) participants from rural areas of Blantyre completed the training. It was expected that a combination of participants from different sectors will help in the implementation of activities as well as during supervision since some interventions will need a multi-sectoral approach. These AEC are called Community Mobilization Teams (CMTs) and are based at the Traditional Authority (TA) level. HSAs were to form part of the CAG in order to help CAG members in technical issues. This approach was only applied to the intervention arm of the program. The CAGs to be formed under this approach were supposed to be based at the Group Village Headman (GVH) level.

Training 30 mentors for HSAs and SHSAs in the integrated community package In November 2012, nurses, clinical officers and medical assistants from the health centers (HCs) in the intervention arm were trained in integrated Maternal Newborn and Child Health and Post-Partum Family Planning (MNCH+PPFP) mentorship. The aim was to equip HF personnel who were not trained in mentoring with these skills. It also included mentors trained in CCM under the CIDA Project. The trained mentors would then be mentoring HSA in integrated MNCH+PPFP. In addition, 15 nurses, clinical officers and medical assistants from the control arm HCs were trained in CCM mentoring.

LMIS and FP data management training of 20 district and HF based personnel The project conducted a Logistics Management and Information System (LMIS) training for 35 drug store clerks from 17 HFs in Blantyre. The training was designed to equip drug store HSAs with skills for managing drug stores. The training provided a refresher for participants with skills for monitoring the movement of drugs

for CCM and commodities for FP. It also provided them with training in writing accurate drug reports in order to avoid stock-outs and abuse. The newly acquired skills will enhance drug store clerks and HFs in the administration and management of drugs, including drugs used for CCM that are currently supplied by Save the Children.

Clinical mentoring visits to HFs for HSAs mentoring During this period, *MwM* focused intensively on completing the above-mentioned trainings. As such, there was not enough time to fully implement clinical mentoring visits to HFs for HSA mentoring as originally planned. These visits will be carried out in Year 3 of project activities.

Supervision visits to HSAs by DHMT and HF based supervisors and *MwM* team This was accomplished mostly by the District Program Coordinators for CCM and CBMNC, and the *MwM* team. The goal of the supervisory visits in the control arm of the project was to find out if HSAs were providing quality CCM care. For the intervention site, the goal was to find out how the HSAs were delivering integrated MNCH+FP services at the community level. Lesson learned during the supervisions indicated that there is a need for intensive supervision, especially to ensure that all the trainings are finalized and that integration is done properly so that HSAs are able to report accurately. The DHMT did not conduct any HSAs supervisory visits during this reporting period due to competing priorities.

Facilitate roll out and consistent use of data collection tools At the end of every training module, HSAs were provided with the corresponding monitoring tools in order to ensure immediate collection of data after implementation in their catchment areas. HSAs practiced using these tools during training.

Advocate for consistent access to drugs and FP methods through participation in national and district-level sub committees, i.e., FP, Safe Motherhood, IMCI, etc. The *MwM* Program Manager has regularly participated in the national Safe Motherhood and Family Planning Subcommittee meetings. During these trainings, *MwM* has been in the forefront advocating for access to FP commodities by providing stock level status reports through pharmacy personnel and the FP Coordinator. The challenge continues to be that the regional medical stores that Blantyre DHO purchases its medicines from, lacks/runs out of FP commodities; districts can only wait until the commodities are available in the regional medical stores. At the district level, *MwM* has been meeting with the Blantyre DHMT regarding CCM drugs and supplies, as the CIDA Project which was funding CCM drug procurement phased out in February 2013. These drugs will still be needed to ensure smooth running of OR. As a result of several discussions conducted, the DHO requested that the HF In-Charge start quantifying/requesting additional CCM drugs.

IR-2: Improved quality of services; Facilitate provision of equipment and supplies *MwM* facilitated the acquisition and distribution of equipment and supplies to enable health workers and HSAs trained by *MwM* to deliver services. UNFPA, JSI Deliver and UNICEF all indicated insufficient supplies as they had distributed theirs to their focus district. Using resources from CIDA and SC Italy, Save the Children assisted by providing the following supplies to HSAs: salter weighing scales, backpacks for SBCC materials, bicycles, drug boxes, respiratory timers and measuring cups Thermometers and other supplies were distributed to 99 HSAa for the CBMNC activities. In addition, *MwM* distributed HBB supplies to health workers trained in IMNC + PFP.

Facilitate access to LAPMs through partners *MwM* is actively collaborating with Banja la Mtsogolo (BLM) to increase access to LTFP/permanent methods of FP. BLM will continue to visit health centres

once a month to provide these methods and coordinate with *MwM* to take advantage of Child Health Days in the future.

Facilitate acquisition and distribution of HF protocols from DRH During this period *MwM* facilitated acquisition and distribution of Tiaht charts from the DRH of the MoH and placed in FP clinics/*MwM* facilities for use during counselling.

Orientation of 15 district level mentors of facility based MNCH providers In October 2012 *MwM*, in collaboration with the Blantyre DHO, conducted an orientation training to strengthen the skills of 20 district-level mentors of facility-based MNCH providers. The activity was facilitated by national trainers from SSDI-Services, MoH Zonal Supervisors and Nursing Officers, and CCM trainers. This training helped ensure buy-in by district-level mentors.

Training 30 mentors for HSAs and SHSAs on IMNCH /PPFP In November 2012, nurses, clinical officers and medical assistants from the health centers (HCs) in the intervention arm were trained in mentoring the new integrated community-based package (MCHN+PPFP). The aim was to equip HF personnel who were not trained in mentoring with these skills. It also included mentors trained in CCM under the CIDA Project. The trained mentors would then be mentoring HSA in integrated MNCH+PPFP. The workshop had 15 participants from the eight HFs where *MwM* will be implementing activities. All HF personnel were encouraged to go and brief staff from their HF on the project. The participants were also advised to take time to familiarize themselves with mentorship by accompanying CCM mentors on their mentorship sessions. In addition, 15 nurses, clinical officers and medical assistants from the HCs in the control arm were trained in CCM mentoring. The goal was to equip participants not previously trained in mentoring with these skills in CCM.

LMIS and FP data management training of 20 district and HF based staff The project conducted a LMIS training for 35 drug store clerks from 17 HFs in Blantyre. The training was designed to equip drug store HSAs with skills for managing drug stores. The training provided a refresher for participants with skills for monitoring the movement of drugs for CCM and commodities for FP. It also provided them with training in writing accurate drug reports in order to avoid stock-outs and abuse. The newly acquired skills will enhance drug store clerks and HFs in the administration and management of drugs, including drugs used for CCM that are currently supplied by Save the Children.

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IR-3: Demand for interventions improved Control area training of 49 HSAs and community leaders in MNH Community Mobilization (CM) using current/existing training packages – 6 days The participants (HSAs and the Area Supervisors) for training were drawn from nine HFs from the control arm of *MwM*. The methodology for the training included theoretical training and a field visit; enabling participants to experiment with how to explore health issues with the community. The tools used were: picture cards; problem tree, focus group discussions; and resource mapping. In April in the control area, 50 HSAs were trained in CM and CAC by national CM trainers. The HSA training was conducted in one session that covered all seven phases in the CAC Cycle (Prepare to Mobilize, Organize the Communities for Action, Explore the Health Issues and Set Priorities, Plan Together, Act Together, Evaluate Together and Scale-up.) The focus for this approach is that only MNH problems will be identified. For other technical components, they will use their usual CM approaches. Upon completion of the training the HSAs were tasked to CAGs in their catchment areas and submit work plans of their CM CAC activities. To date, 50 CAGs have been formed in the intervention area and most of them have facilitated the problem identification step.

Orientation for existing 90 CBDAs on counseling for healthy timing and spacing of pregnancies *MwM*, in collaboration with the Ministry of Health (BT DHO) conducted the orientation of existing CBDAs, their primary supervisors (HSAs), and secondary supervisors (nurses) in PPF, health timing and spacing of pregnancies (HTSP). A total of 95 CBDAs were oriented in PPF, new trends in FP services, and methods provided emphasizing oral contraceptives, condoms, LAM and emergency contraceptive procedures (ECPs). During trainings, CBDAs indicated several challenges including: lack of bicycles to use for travelling to meet clients and submit monthly reports at their HFs; inconsistent supply of FP commodities; lack of regular meetings with other CBDAs and HWs to share experiences and knowledge in order to enable them to perform better; and inadequate supervision. Programmatically, the challenge experienced during the training was that some facilities in the *MwM* catchment area do not have CBDAs; therefore no orientation of any CBDA was conducted in these areas. It is expected that CBDAs will motivate clients including women, girls and men to use PPF methods and that CBDAs will provide services as necessary.

Establish contracts with radio stations (Zodiak, MBC, Maria) to channel MNCH/PPF messages (budget allowing) Due to budget limitations in Year 2, this activity was not implemented during this reporting period and is planned for Year 3.

IR4: Environment enabled Participate in national Technical Working Group (TWG) on FP, IMCI and Safe Motherhood *MwM* participates in the Safe Motherhood and Family Planning Subcommittee, conducted by the DHO. The meetings are held at least once every quarter. Key agendas include updates on MNH, reproductive and child health issues, such as implementation progress for MoH programs and partners. At the district level, the M&E/OR Coordinator participates in the District Executive Committee (DEC) meetings attended by representatives from different governmental departments, and local and international NGOs based in Blantyre. These meeting are usually called by the Director of the Planning Department to discuss district development issues such as health concerns and general program implementation. The meetings provide an opportunity for all partners to share information regarding progress made on health projects at the district and community levels.

Bi-annual operations research advisory meetings During this reporting year, one meeting was organized by the COM to share preliminary baseline results and to briefly discuss the progress of program implementation and review next steps. The meeting included members of the *MwM* Research Advisory Committee. These members were chosen in Year 1 of *MwM* and include representatives from the: government; University of Malawi; Kamuzu College of Nursing; Save the Children; the COM; PHC & HEU from the MoH; and the Blantyre DHO. There were 15 participants from Blantyre and four participants from Lilongwe.

Bi-annual *MwM* Steering Committee Meetings The project recognizes the need to closely collaborate with key partners from other international and local organizations also working with government health departments in Blantyre. *MwM* established a steering committee designed to provide technical guidance and advice to the program. *MwM* held the first Steering Committee meeting on the 27th of September, during this reporting period. The meeting reviewed program progress during Year 2 and sought feedback from partners on how to continue to implement the program effectively. Partners from the MoH, international NGOS, government departments (e.g. National Statistics Office), the COM, traditional leaders, and medical and nursing regulatory bodies were invited to attend this meeting. Objectives of the Steering Committee meeting include: 1) reviewing program progress in Year 2; 2) drawing lessons to enhance effective programming, 3) sharing experiences with best practices; 4) encouraging stakeholder involvement; and 5) collaboration to identify possible OR challenges and recommendations for next steps. The project was unable to hold two scheduled meetings in Year 2 as efforts were focused on finalizing all of the trainings necessary for OR, as previously discussed.

Table 2: Summary of Key Analysis and Use of Findings

Expected Results	Actual Results	Analysis (what worked, what didn't, and why)	Stakeholders Engaged in Analysis	Lessons learnt and Recommendations	Use of Findings (for course corrections, policy, etc.)
All HSAs to reside within the catchment area for the duration of the project.	Most of the HSAs do not reside in their catchment area. Some HSAs have been transferred out since.	Deployment of the HSAs outside Blantyre districts continues as DHOs do not have mandate on deployment of HSAs; deployment comes from headquarters.	Blantyre DHMT, Deputy Director of Preventive Health Services (PHS)	Need to find out how other organizations resolved the issue e.g. Millennium Village had a similar problem but resolved it.	

CAGs to work as volunteers without monetary incentives.	In some places where CAGs have been formed, there are similar structure under presidential initiatives on SM who are getting incentives like T-shirts, wrap clothes and even cash. <i>MwM</i> does not provide; this political set-up would likely affect CAGs approach especially.	Discussed with the CAGs that political groups are different from others depending on donor, meaning of the group and scope. Some were able to understand and decided to forge forward with the work.	Blantyre DHMT, village headmen	Need to discuss with TAs on next steps as <i>MwM</i> cannot change the approach as it has been implemented in other parts with success.	
CM conducted by CMT- (officers from different government departments for multisectoral approach) at TA for intervention arm will work better than he one facilitated by HSAs.	Lack of ownership by CAGs formed by CMTs. The CAGs being facilitated by HSAs are well organized, way ahead of the CAGs being implemented by CMTs despite starting at the same time.	CMTs coming from different backgrounds would bring a diversity of ideas on mobilization. CMT are government officials and need allowances for facilitating CAC activities.	COM, DHMT, Deputy Director, PHS, Save the Children.	Need to wait for OR results.	Need to wait for OR results.
HSAs working at community level full time.	HSAs are involved in other HF activities e.g. drug store management, TB Microscopy.		COM, DHMT, Deputy Director, PHS, Save the Children.	DHOs to ensure that activities that HSAs conduct should not detach them from the community. Members agreed that no NGO or MoH officials should just use HSAs without consulting the DHO even if adding some roles to HSAs.	
Consistent availability of CCM drugs supplied by the DHO.	DHO running out of CCM drugs.	Discussions were conducted with the DHMT regarding CCM drugs and DHO was very supportive. Advised HCs with CCM clinics to increase quantity of drugs ordered. This is being done but sometimes the Regional Medical Stores do not have supplies of those drugs; hence the DHO is powerless to do anything.	COM, DHMT, Deputy Director, PHS, Save the Children.	DHO to ask Central Medical Stores to keep a buffer for the DHO of CCM drugs. IMCI Coordinators to communicate about drug stock- outs with Blantyre DHO in time.	

Stakeholder involvement As indicated above, major program accomplishments included the completion of all trainings for community health workers (HSAs) and service providers. As these trainings were very technical, *MwM* consulted respective government departments at the national level for their input including the Reproductive Health Department for MNH and FP, the IMCI Department, and the PHC Department responsible for all HSAs trainings, recruitment and deployment. Selection of trainers for these trainings was conducted in consultation with respective departments. As for CCM, the IMCI Unit selected trainers on its own. In all the trainings, desk officers for MNH, FP, and IMCI were part of the trainings to ensure quality.

At the district level, the main partner is the Blantyre DHO. The DHO also has desk officers responsible for respective departments, as above. These desk officers were also involved in the selection of trainers at the

district level. *MwM* also funded the participation of three desk officers to the TOT of CM so that they could assist in supervision and training of CM at the district level. The district desk officers are involved in supervision, using Blantyre DHO resources.

Implementation to date of capacity building and collaboration with local partner organizations and ministry systems *MwM* participates in quarterly Safe Motherhood and Family Planning Subcommittee meetings at the national level, as well as District Executive Committee meetings and MoH planning meetings at the district level. Regular updates and reports to key partners are provided during these meetings. *MwM* has been working in collaboration with the DHMT to conduct trainings and joint supportive supervision in the *MwM* catchment area. The project has also been actively involving DHO program coordinators to facilitate its implementation. Further, because Blantyre HFs lack capacity to provide long-term FP methods, *MwM* has been collaborating with BLM. *MwM* has strengthened the supervisory and mentoring skills of HSA supervisors and facility staff. It has also trained the DHO Program Coordinators in MNH, CCM, and FP integrated supervision. *MwM* funded the training of three Program Coordinators as CM trainers.

Coordination/collaboration with USAID Malawi Mission Save the Children consults regularly with the USAID Mission. Due to a resignation, there is currently no activity officer assigned. The Mission's HPN Officer planned to visit *MwM* in September 2013 but the visit was postponed until late October. *MwM* collaborates actively with SSDI-Services and SSDI-Communication, two of the current USAID bilateral projects. The SSDI-Services Senior Advisor for Child Health was involved in development of the integrated community-package, and the Senior Advisor for CM from SSDI-Communications facilitated for development of the CM module. SSDI-Services has adopted the integrated community package and SBCC manuals and materials for use in its 15 focus districts.

III. OPERATIONS RESEARCH ANNUAL PROGRESS

Table 3: OR Study Progress and Achievements in Year 2 (2012-2013)

<i>Related Specific Objective/s of the Task/s (as outlined in OR Protocol)</i>	<i>OR Study Key Activities/ Tasks Addressed during this Reporting Period</i>	<i>Any important Findings, Data, and/or Discussion of Progress (positive/negative)</i>	<i>Use and/or Dissemination of Results to Stakeholders</i>
Conduction of a baseline survey	Stakeholder planning and orientation meetings Recruitment of OR baseline staff Finalization of data collection tools Training of staff on data collection tools Data collection and entry Analysis of data Report writing	It was realized that it was necessary to recruit a Project Coordinator to oversee the day-to-day work activities even though this was not planned at the beginning. The problems arose because COM was using teleform software which has a number of inherent problems. Subsequent data collection for the rest of the OR period would use tablets. SCI helped with the purchasing process.	Results were/will be disseminated to stakeholders in the following forums: <i>MwM</i> Research Advisory Committee conducted in July 2013 Annual report Annual research dissemination meeting in Lilongwe Malawi in November 2013 organized by NAC and COM Save the Children Child Survival Steering Committee meeting on 27 th September 2013
Data Collection Study #1 (effectiveness of integrated community package)	Not done	Not applicable	Not applicable
Data Cleaning and Analysis	Not done	Not applicable	Not applicable

Research Products An abstract will be presented at the COM Annual Research Dissemination Conference in November 2013. It is currently in preparation and will reflect adjustments and lessons, and incorporate inputs from key stakeholders.

Problems/Challenges *Fewer clients available during data collection* During the baseline survey, the number of clients seen by HSAs on a clinic day were fewer than anticipated; in some cases the clinics were conducted early (before 7:30 am) and late (after 5 pm) in the day but not during normal working hours. In other cases, HSAs had duties at the HF. This meant fewer clients available for the data collectors to interview. *Delay in conducting baseline survey* The COM research team was unexpectedly delayed in rolling out some of its planned activities as per plan in the protocol. *Documentation exercise delayed* Same as above.

Changes Made to Original OR Plans Client satisfaction and understanding interviews were conducted using a structured questionnaire. These were originally scheduled to be conducted among all of the HSAs within each HF. Clients were to be selected from among the mothers of children below two years of age; 50 were to be sampled consecutively as exit interviews from the consultation and 50 were to be randomly sampled from among eligible community members. Unfortunately, it was not feasible to survey and sample from all HSAs in the study area. Instead one HSA was randomly sampled for each HF. Based on population data obtained by Save the Children, it was anticipated that sampling would be needed among the eligible women for most of the HSAs. During mapping to identify eligible mothers, it became apparent that most HSAs did not serve more than 100 such women, contrary to the information used in planning of the study. Therefore all eligible women were asked to participate in the study. These changes will be reflected in the revised protocol which will be sent together with the study report to the ethics committee in at the end of September 2013.

Major OR Plans for Coming Year The major objective for the coming year will be to collect data periodically on project indicators as illustrated in the table below:

Times of data collection for major indicators

<i>Objectives – Indicators</i>	<i>Sampling Time Frame</i>							
	<i>2013</i>				<i>2014</i>			
	<i>Q1</i>	<i>Q2</i>	<i>Q3</i>	<i>Q4</i>	<i>Q1</i>	<i>Q2</i>	<i>Q3</i>	<i>Q4</i>
<i>Missed Opportunities Index</i>		X		X		X		X
<i>Coverage of key MNCH and FP services</i> <i>The proportion of mother/newborn pair who received the recommended number of antenatal and postnatal home visits (up to 8 weeks postpartum)</i> <i>Number of newborns and young infants (<60 days) with at least one danger sign. (sample size will be calculated from the baseline findings to present calculations basis)</i>		X		X		X		X
<i>Quality of Care</i> <i>Proportion of HSAs (or proportion of cases) who correctly manage sick child /case scenarios</i>				X				X
<i>Proportion of CBDAs supervised by HSAs in the last 3months</i>		X		X		X		
<i>Proportion of Community Members satisfied with HSAs services</i>		X		X		X		

**Annex 1: Mwayi wa Moyo Year 3 Annual Work Plan
October 2013-September 2014**

Timeline for planned activities FY14					
		Oct- Dec	Jan- Mar	Apr- June	July- Sept
Cluster	Activity	1	2	3	4
Program Management	Steering committee review meetings		x		x
	Engagement in district implementation plan process	x	x	x	x
Monitoring and Evaluation	Rolling out data collection tools		x	x	
	District level systems and tools in place for ongoing documentation	x	x		
	Success stories, case studies, documentaries, monographs documented	x	x	x	x
	Data Quality Assessment (DQA)	x	x	x	x
	Documentation exercise	x	x	x	x
	Participatory midterm review			x	
	Annual reports submitted				x
Operations Research	Integrated monitoring and supervision system and tools developed and rolled out	x	x	x	x
	Ongoing provision of equipment and supplies for trained HF staff in IMNC + PFPF i.e. JSI Deliver, UNICEF, UNFPA	x	x	x	x
	Ongoing re-equipment and re-supply of HSAs and trained HF staff	x	x	x	x
	Ongoing provision of equipment and supplies for trained HSAs in community integrated package i.e. JSI Deliver, UNICEF, UNFPA	x	x	x	x
Quality of interventions improved	Ongoing acquisition and distribution of HF protocols from RHU	x	x	x	x
	Clinical mentoring visits to HFs for HSAs mentoring	x	x	x	x

	Supervision visits to HSAs by DHMT and HF based supervisors and <i>MwM</i> team	x	x	x	x
	Ongoing use of data collection tools	x	x	x	x
	Bi-annual review meetings with HSAs, SHSAs, other supervisors on integrated package	x			x
	Advocate for consistent drugs and FP methods through participation in national and district level subcommittees i.e. FP, Safe Motherhood, IMCI etc.	x	x	x	x
Demand for interventions improved	Orientation of CAC for VHCs from intervention arm	x	x		
	Establish contracts with radio stations (Zodiak, MBC, Maria) to channel MNCH/PPFP messages (budget allowing)	x	x		
Environment enabled	Participate in national TWG on FP, IMCI and Safe Motherhood	x	x	x	x
	Bi-annual OR TWG meetings	x			x
	Bi-annual <i>MwM</i> Steering Committee meetings	x			x

CHANGES TO THE WORKPLAN

Nearly all activities under trainings and conferences for Year 2 have been achieved. The remaining item is the establishment of contracts with radio stations (Zodiak, MBC, Maria) for MNCH/PPFP messages. This activity has been included in the Year 3 work plan pending availability of funds. Additionally, the orientation of 200 members of village health committees (VHCs) (two per committee) in CM approaches was not achieved due to delays in CM implementation, these are still in the exploration phase.

Annex 2: Mwayi wa Moyo M&E Table

Objective/ Result	Indicators	Source/ Measurement Method	Frequency	Baseline Value	EOP Target
SO: USE of high-impact services and practices increased	<i>% of children age 0-5 months who were exclusively breastfed during the last 24 hours</i>	KPC Survey	BL, EL	67.5%	85%
	<i>% of mothers of children age 0-23 months who had four or more antenatal visits when they were pregnant with the youngest child</i>	KPC Survey	BL/EL	44.3%	65%
	<i>% of mothers of children 0-23 who are using a modern contraceptive method</i>	KPC Survey	BL/EL	56%	65%
	<i>*Couple Years of Protection (CYP) (#)</i>	Service statistics (all SDPS)	quarterly	1050	14000
	<i>*Acceptors new to modern contraception (#)</i>	Service statistics (HC, CBDA, HSA)	Ongoing – collated annually	6067	8582
	<i>% of children age 0-23 months who slept under an insecticide treated bed net the previous night</i>	KPC Survey	BL/EL	44%	65%
	<i>% of children with diarrhea in the last two weeks who received ORS or recommended home fluids</i>	KPC Survey	BL/EL	64.5%	80%
	<i>% of mothers who wash their hands before food preparation, before infant/child feeding, after defecation, and after attending to a child who has defecated</i>	KPC Survey	BL/EL	13%	45%
IR-1: Availability & Access to high-impact interventions increased	<i># of all HSAs trained in PFP</i>	District records, project reports	Tracked monthly, reported quarterly	99	148

	<i># of HtR-HSAs trained in CCM</i>	District records, project reports	Tracked monthly, reported quarterly	99	99
	<i># of all HSAs trained in CCM</i>	District records, project reports	Tracked monthly, reported quarterly	99	148
	<i># of all HSAs trained in CBMNC</i>	District records, project reports	Tracked monthly, reported quarterly	99	148
	<i># of all HSAs trained in Integrated Community Package</i>	District records, Project reports	Tracked monthly, reported quarterly	102	52
	<i># of HC workers trained in IMNC (including HBB)</i>	District records, project reports	Tracked monthly, reported quarterly	17	17
	<i># of HC-based KMC units functioning in Blantyre District</i>	District records, project reports	Tracked monthly, reported quarterly	5	14
	<i>% of mothers of children 0-23 months who report discussing PFP with a HW or promoter during last pregnancy</i>	KPC Survey	BL/EL	43%	70%
	<i>% of mothers of children 0-23 months who received a post-natal home visit from an appropriate trained HW within two days after birth</i>	KPC Survey	BL/EL	23%	50%
IR-2: Quality of interventions assured	<i># of service delivery points reporting no stock outs of FP methods in past 3 months (by HC, HSA, CBDA)</i>	Supervision reports, project monitoring	Quarterly	12 HC 60 HSAs	15 148

	<i># of CCM-trained HSAs with a continuous supply of key CCM drugs</i>	HFA, district drug reporting form, district records	Quarterly	99	148
	<i># of HSAs who live in their catchment areas</i>	HFA, district records	Quarterly	50	148
	<i># of HSAs supervised in the last 3 months</i>	HFA, supervision records	Quarterly	60	99
	<i># of HSAs supervised in last 3 months with reinforcement of clinical practice (mentored)</i>	HFA, supervision records	Quarterly	60	99
	<i>% of children age 0-23 months with a febrile episode during the last two weeks who were treated with an effective anti-malarial drug within 24 hours after fever began</i>	KPC Survey	BL/EL	19.1%	60%
IR-3: Demand for interventions improved	<i>% of children 0-23 months with chest-related cough or fast and/or difficult breathing in the last two weeks were taken to an appropriate health provider</i>	KPC Survey	BL/EL	65%	80%
	<i>% of mothers of children 0-23 who know at least two risks of having a birth to pregnancy interval of less than 24 months</i>	KPC Survey	BL/EL	62.3%	80%
	<i>Percentage of mothers of children 0-23 months who knew at least two danger signs for mothers during pregnancy</i>	KPC Survey	BL/EL	40%	75%
IR-4: Environment enabled	<i>% of core groups that have completed at least two CACs</i>	Project/districts records,	Quarterly, reported annually	0	45%
	<i>HSA job description redrafted to incorporate delivery of CCM+CBMNC+PPFP or</i>	National minutes TWG, other	Reported annually	N	Y

	<i>Integrated Package</i>				
	<i>Integrated community package endorsed by MOH</i>	National minutes, other	Reported annually	Y	Y
USAID COMPLIANCE MONITORING FOR FP	<i>USAID compliance monitoring completed quarterly</i>	Project records, compliance monitoring tools	Quarterly, reported annually	Y	Y

**=CYP and New Acceptors to be calculated based on women of reproductive age*

ANNEX 3: Program Data Form

Child Survival and Health Grants Program Project Summary

Oct-19-2013

Save the Children (Malawi)

General Project Information

Cooperative Agreement Number: AID-OAA-A-11-00058
SC Headquarters Technical Backstop: Karen Waltensperger
SC Headquarters Technical Backstop Backup: Winifride Mwebesa
Field Program Manager: Luwiza Puleni
Midterm Evaluator:
Final Evaluator:
Headquarter Financial Contact: Carmen Weder
Project Dates: 10/1/2011 - 3/31/2016 (FY2011)
Project Type: Innovation
USAID Mission Contact: Miriam Lutz
Project Web Site:

Field Program Manager

Name: Luwiza Puleni (Program Manager)
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Grant Funding Information

USAID Funding: \$2,000,000 **PVO Match:** \$666,600

General Project Description

Save the Children, a 2011 Innovation category grantee, is implementing the *Mwayi wa Moyo* "A Chance to Live" Project in Blantyre District, Malawi. The project goal is to reduce under-five mortality through increased use of high-impact maternal, newborn and child health (MNCH) interventions (services and practices), including post-partum family planning (PPFP). Save the Children is supporting the Ministry of Health (MOH) to streamline and integrate the current community packages into a single coherent package that fills the gaps in the continuum of care and delivers more interventions at better quality and less cost.

Mwayi wa Moyo will incorporate family planning with objective to increase use of key postpartum family planning (PPFP) services and practices among mothers with children under two and their partners. Save the Children will work with the MOH to strengthen the integrated package to include PPFP. A "no-missed" opportunity intervention will seek to amplify the number of mothers reached with information and services during the first two years postpartum. In addition, Save the Children and partners will identify effective approaches to reducing the high teenage pregnancy rate in Malawi.

Project Location

Latitude: -13.25	Longitude: 38.30
Project Location Types:	Peri-urban Rural
Levels of Intervention:	Health Center Health Post Level Home Community
Province(s):	Southern Region
District(s):	Blantyre District
Sub-District(s):	--

Operations Research Information

OR Project Title:	Vertical Vs Integrated: Assessing the effectiveness of an integrated community-based MNCH and FP package in reducing missed opportunities along the life cycle continuum
Cost of OR Activities:	\$190,000
Research Partner(s):	Department of Pediatrics and Child Health, College of Medicine, University of Malawi
OR Project Description:	The operations research (OR), which is being carried out in partnership with the Department of Pediatrics and Child Health of the College of Medicine (COM), will evaluate the effectiveness of the integrated community package delivered by HSAs that incorporates CCM, CBMNC, and PPFP to inform programs on achieving impact at scale.

Partners

College of Medicine (Subgrantee)	\$190,000
Ministry of Health (National level and DHMT) (Collaborating Partner)	\$0
USAID/SSDI-Services (bilateral project) (Collaborating Partner)	\$0
Mother2Mother (Collaborating Partner)	\$0
Development Aid from People to People (DAPP) (Collaborating Partner)	\$0
Banja la Mtsogolo (Collaborating Partner)	\$0
National Statistics Office (NSO) (Collaborating Partner)	\$0
World Vision (Collaborating Partner)	\$0
USAID/SSDI-Communication (bilateral project) (Collaborating Partner)	\$0

Strategies

Social and Behavioral Change Strategies:	Community Mobilization Interpersonal Communication
Health Services Access Strategies:	Addressing social barriers (i.e. gender, socio-cultural, etc) Implementation in a geographic area that the government has identified as poor and underserved
Health Systems Strengthening:	Quality Assurance Supportive Supervision Task Shifting Developing/Helping to develop clinical protocols, procedures, case management guidelines Developing/Helping to develop job aids Monitoring health facility worker adherence with evidence-based guidelines Providing feedback on health worker performance Monitoring CHW adherence with evidence-based guidelines Community role in supervision of CHWs Review of clinical records (for quality assessment/feedback) Coordinating existing HMIS with community level data Community input on quality improvement
Strategies for Enabling Environment:	Advocacy for revisions to national guidelines/protocols Stakeholder engagement and policy dialogue (local/state or national)
Tools/Methodologies:	Rapid Health Facility Assessment Community-based Monitoring of Vital Events
Capacity Building	
Local Partners:	National Ministry of Health (MOH) Dist. Health System Health Facility Staff Health CBOs Government sanctioned CHWs

Interventions & Components

Control of Diarrheal Diseases (18%)	IMCI Integration	CHW Training HF Training
- Hand Washing - ORS/Home Fluids - Feeding/Breastfeeding - Zinc - Community Case Management with Zinc (Implementation) - Community Case Management with ORS (Implementation)		
Malaria (18%)		
Maternal & Newborn Care (34%)	IMCI Integration	CHW Training HF Training
- Neonatal Tetanus - Recognition of Danger signs - Newborn Care - Postpartum Care - Child Spacing - Integration with Iron & Folic Acid - Normal Delivery Care - Birth Plans		
Pneumonia Case Management (18%)	IMCI Integration	CHW Training HF Training
- Case Management Counseling - Access to Providers Antibiotics - Recognition of Pneumonia Danger Signs - Zinc		

Operational Plan Indicators

Number of People Trained in Maternal/Newborn Health			
Gender	Year	Target	Actual
Female	2012	30	
Female	2012		20
Male	2012		16
Male	2012	60	
Female	2013	33	
Female	2013		39
Male	2013		60
Male	2013	65	
Female	2014	0	
Male	2014	0	
Female	2015	25	
Male	2015	25	
Number of People Trained in Child Health & Nutrition			
Gender	Year	Target	Actual
Female	2012	30	
Female	2012		5
Male	2012		11
Male	2012	60	
Female	2013	33	
Female	2013		39
Male	2013		60
Male	2013	65	
Female	2014	0	
Male	2014	0	
Female	2015	25	
Male	2015	25	
Number of People Trained in Malaria Treatment or Prevention			
Gender	Year	Target	Actual
Female	2012		5
Female	2012	30	
Male	2012		11
Male	2012	60	
Female	2013		39
Female	2013	33	
Male	2013		60
Male	2013	65	
Female	2014	0	
Male	2014	0	
Female	2015	25	
Male	2015	25	

Locations & Sub-Areas

Total Population: 538,413

Target Beneficiaries

Malawi - SC - FY2011

Children 0-59 months 91,530

Women 15-49 years 113,067

Beneficiaries Total 204,597

Rapid Catch Indicators: DIP Submission

Sample Type: 30 Cluster				
Indicator	Numerator	Denominator	Percentage	Confidence Interval
Percentage of mothers with children age 0-23 months who received at least two Tetanus toxoid vaccinations before the birth of their youngest child	179	300	59.7%	7.9
Percentage of children age 0-23 months whose births were attended by skilled personnel	254	300	84.7%	5.8
Percentage of children age 0-5 months who were exclusively breastfed during the last 24 hours	54	80	67.5%	14.5
Percentage of children age 6-23 months who received a dose of Vitamin A in the last 6 months: card verified or mother's recall	171	220	77.7%	7.8
Percentage of children age 12-23 months who received a measles vaccination	114	130	87.7%	8.0
Percentage of children age 12-23 months who received DTP1 according to the vaccination card or mother's recall by the time of the survey	85	130	65.4%	11.6
Percentage of children age 12-23 months who received DTP3 according to the vaccination card or mother's recall by the time of the survey	77	130	59.2%	11.9
Percentage of children age 0-23 months with a febrile episode during the last two weeks who were treated with an effective anti-malarial drug within 24 hours after the fever began	29	152	19.1%	8.8
Percentage of children age 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/or recommended home fluids	80	124	64.5%	11.9
Percentage of children age 0-23 months with chest-related cough and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider	67	103	65.0%	13.0
Percentage of households of children age 0-23 months that treat water effectively	240	300	80.0%	6.4
Percentage of mothers of children age 0-23 months who live in households with soap at the place for hand washing	231	300	77.0%	6.7
Percentage of children age 0-23 months who slept under an insecticide-treated bednet (in malaria risk areas, where bednet use is effective) the previous night	132	300	44.0%	7.9
Percentage of children 0-23 months who are underweight (-2 SD for the median weight for age, according to the WHO/NCHS reference population)	56	300	18.7%	6.2
Percentage of infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices	121	220	55.0%	9.3
Percentage of mothers of children age 0-23 months who had four or more antenatal visits when they were pregnant with the youngest child	133	300	44.3%	8.0
Percentage of mothers of children age 0-23 months who are using a modern contraceptive method	168	300	56.0%	7.9
Percentage of children age 0-23 months who received a post-natal visit from an appropriately trained health worker within two days after birth	69	300	23.0%	6.7

Rapid Catch Indicators: Mid-term

Rapid Catch Indicators: Final Evaluation

Rapid Catch Indicator Comments

The *Mwayi wa Moyo* Baseline (KPC Survey) was conducted in February 2012. The report was reviewed and finalized for adoption.

ANNEX 4: Learning Briefs

A. Program Learning Brief



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Save the Children

HSA trainees in new integrated community package



Photo by: KZ Waltensperger

Key Findings:

- Lessons learnt from *Mwayi wa Moyo* were incorporated into the national HSA task-shifting draft policy on HSA roles and responsibilities.
- MOH adopted the integrated community package to be reviewed and modified, if necessary, when operations research results are available.
- SSDI-Services supported design and has adopted the integrated community-based package for its 15 districts.
- The critical importance of engaging all relevant government departments at ALL stages of the development process was reinforced through this integration experience.
- Full involvement and active government participation has consolidated ownership, facilitated adoption of documents and materials, and ensured uptake and sustainability.
- The CM approach is key to local support for the HSA and use of the package.
- When CM facilitators are motivated, the CAGs are stimulated to act to confront local challenges and empowered to solve problems.

Malawi Adopts Integrated Community Package: Process and Lessons Learnt

Health Surveillance Assistants (HSAs) are Malawi's government-paid cadre of community health workers. Over the past decade, the portfolio of community-based interventions delivered by HSAs has expanded in number and complexity.

This cadre of frontline health workers once specialized in health promotion and environmental sanitation. Today the HSA package includes a variety of preventive and curative interventions for maternal, newborn and child health (MNCH) and family planning (FP), including community case management (CCM).

Vertical design and implementation of these various packages has resulted in gaps in the continuum of care; weak supervision, monitoring, and reporting; fragmentation of social-behavioral change communication (SBCC) messages; and workload imbalance that impairs quality and efficiency.

Through its four-and-a half-year *Mwayi wa Moyo* ("A Chance to Live") project being implemented in Blantyre District, Save the Children is supporting the Ministry of Health (MOH) at district and national levels to transform the HSA portfolio into a coherent integrated package of life-saving MNCH +FP interventions that delivers more interventions at better quality and less cost with more efficiency..

**This project was funded
by the U.S. Agency for International Development
through the Child Survival and Health Grants Program
October 2013**

Background

Through its *Mwayi wa Moyo* project, Save the Children partners with the MOH, Blantyre District Health Management Team (DHMT), Malawi College of Medicine (COM), and USAID bilateral Support for Service Delivery Integration (SSDI) projects to reduce under-5 mortality through increased use of high-impact MNCH and FP interventions by improving access/availability quality, demand, and the enabling environment.

At the district level, *Mwayi wa Moyo* benefits Blantyre District's underserved rural communities in hard to reach areas with a total target population of more than half a million (~538,413). This includes 91,530 (17%) children under five years and 113,067 (21%) women of reproductive age, with 26,921 (5%) new pregnancies each year.

Project Design

Malawi's Health Sector Strategic Plan (2011-16) prioritizes integration at all levels, from policy to point of service delivery. This is supported by the Maputo Plan of Action and facilitated by the three USAID SSDI bilateral projects (SSDI-Services, SSDI-Communication, SSDI-Systems).

Mwayi wa Moyo's aim is to design and test a scalable approach and model for an integrated, streamlined community package delivered by HSAs and supported by the DHMT and community structures. *Mwayi wa Moyo*'s partner, the COM, is conducting operations research to determine whether the "integrated community based package" (combining service delivery approaches, integrated training, supervision, mentorship, and community mobilization [CM]) can reduce missed opportunities and improve coverage, quality, and client satisfaction

Methodology

A consultation workshop of the Integrated Community Package Technical Working Group (ICPTWG) served as a first step in the process of streamlining and integrating the existing MNCH + FP packages into a single coherent package. This included key representatives from the following MOH entities: Directorate of Reproductive Health, Integrated Management of Childhood Illness Unit, Preventive Health Services, Health Education Unit, Blantyre District Health Office, South West Zone; as well as the SSDI-Services, SSDI-Communications, and Save the Children. To avoid "reinventing the wheel," *Mwayi wa Moyo* adapted existing MOH-certified training materials previously developed by USAID MCHIP, Save the Children, and MOH, among others.

Upon thorough review of existing manuals and materials, overlapping information was removed and cross-cutting issues extracted and compiled into a single Cross-Cutting Issues module that incorporated emerging issues and updates. Consistent MNCH+FP messages were integrated into all the modules, as were registers, and tools for SBCC, supervision and mentoring. Finally, the SSDI-promoted CM approach of involving rural government workers to facilitate formation of CAGs was woven in.

This process produced the following draft modules: **Module 1: Cross-Cutting Issues** covers interpersonal communication skills, infection prevention, quality assurance, nutrition, and the MNCH continuum of care. **Module 2: CM for Integrated MNCH+FP** includes a newly-developed socio-behavior change strategy to guide implementation. **Module 3: Integrated**

Community-Based Maternal and Newborn Care includes essential postpartum and postnatal care and exclusive breastfeeding, as well as community care for HIV-infected mothers and infants. **Module 4: CCM for young infants (0-2 months) and children 2-59 months** with neonatal sepsis, pneumonia, diarrhea, malaria.

Finally, MNCH+FP messages were reviewed and integrated and a comprehensive SBCC comprehensive toolkit developed, along with monitoring, supervision and mentoring tools.

The draft training modules, both theoretical and practical aspects, were pre-tested by national trainers in CBMNC, iCCM, CM and FP with HSAs in Mulanje where the Community-Based Maternal and Newborn Care (CBMNC) package was already being implemented.

Conclusions and Lessons Learnt

- Lessons learnt from *Mwayi wa Moyo* have been incorporated into the national HSA task shifting draft policy on HSAs roles and responsibilities.
- MOH adopted the integrated community package to be reviewed and modified, if necessary, when operations research results are available.
- SSDI-Services supported design and had adopted the integrated community-based package for its 15 districts.
- The critical importance of engaging all relevant government departments at **ALL** stages of the development process was reinforced through this integration experience. Full involvement and active government participation has consolidated ownership, facilitated adoption of documents and materials, and ensured uptake and sustainability.
- The CM approach is key to local support for the HSA and use of the package. When CM facilitators are motivated, the CAGs are stimulated to act to confront local challenges and empowered to solve problems.

Recommendations and Use of Findings

- Save the Children and the Blantyre DHMT plan to conduct joint monitoring and supervision in Year 3 to support HSAs in delivery of high-quality integrated services.
- The COM plans to carry out a parallel documentation exercise with attention to gaps, barriers, and facilitators.
- As a partner in SSDI-Services, Save the Children will closely monitor implementation of use of the integrated community package in its 15 districts.
- When the OR results are available, all stakeholders will review the integrated community package and its application and take decisions about modification and/or expansion within the context of the changing HSA strategy.

Mwayi wa Moyo, in Blantyre District, Malawi, is supported by the American people through the United States Agency for International Development (USAID) through its Child Survival and Health Grants Program. Mwayi wa Moyo is managed by Save the Children under Cooperative Agreement No. AID-OAA-A-11-00058. The views expressed in this material do not necessarily reflect the views of USAID or the United States Government.

For more information about Save the Children, visit: www.savethechildren.org.

B. Operations Research Brief

Key Findings:

- **More than a third (37%) of HSAs do not reside in their catchment areas.**
- **Only about the same proportion of HSAs (35%) reported being available seven days per week to provide services in their communities.**
- **Poor or no suitable accommodation was cited as a main reason for non-residency.**
- **Only one in ten mothers received the recommended four antenatal care visits.**
- **Of children 2-23 months with danger signs, only 38% were taken to see the HSA for care.**



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Assessing the effectiveness of an integrated strategy for community-based MNCH+FP in Blantyre District, Malawi:

District, Malawi:

A Operations Research Progress Report

In Malawi, the use of high-impact interventions to address maternal and child mortality is low. Currently, community-based interventions for maternal, newborn and child health (MNCH) and family planning (FP) are implemented in a vertical and fragmented manner, causing gaps in the continuum of care, missed opportunities for integrated service delivery, duplication of resources for implementation and low quality of care.

Through *Mwayi wa Moyo* (“A Chance to Live”), Save the Children and the Malawi College of Medicine (COM) are supporting the Ministry of Health and Blantyre District Health Management Team (DHMT) to address this problem by integrating care at the level of service delivery. This is being achieved by integrating training packages and application of comprehensive guidelines on community mobilization (CM), FP and MNCH. Integrated supervision and mentoring are the key to high quality integrated service delivery.

The COM is leading an operations research study to assess the effectiveness of an integrated strategy for community-based MNCH+FP in Blantyre District, Malawi.

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Background

Community-based delivery of MNCH and FP interventions delivered by Health Surveillance Assistants (HSAs) are currently planned, designed and implemented separately at different points of time and scaled up sporadically on a district-by-district basis. This vertical and fragmented approach to program design, implementation and management is transmitted down to the district and community levels where health care is delivered. This makes it difficult for HSAs to plan to deliver several services at different times to the same people, making their caseloads high. This “system” also contributes to poor service delivery quality and missed opportunities to provide multiple services at single interactions between HSAs and families.

This operational research, conducted by the COM, evaluates whether the “integrated community package” (service delivery approaches, integrated training, supervision, mentorship and CM) will reduce missed opportunities and improve coverage, quality and client satisfaction. The results from this study will inform policy about integrated versus vertical approaches and are especially relevant for the USAID bilateral Support for Service Delivery Integration-Services (SSDI-Services) project, designed to support the integrated delivery of the essential health package at the levels of health facility and community.

Intervention Design and Implementation

The *Mwayi wa Moyo* integration innovation is being implemented in phases. In the first phase, a baseline survey was conducted by the College of Medicine and its methodology and results are being presented in this report. The 17 health centers were randomly assigned to either an intervention or control arm. The HSAs and their supervisors received either an integrated or a standard “fragmented” training according to their allocation. Other trainings that took place included trainings of HSA supervisors, community-based distribution agents (CBDAs) and Community Action Groups (CAGs). Now complete, the trainings will be followed by a two-year period of data collection to compare the two groups relative to missed opportunities, coverage and quality of care of services. In the second phase, the intervention will be taken to scale district-wide.

Methodology

Baseline Survey

Ninety-nine (99) hard-to-reach HSAs within Blantyre District are included in the operations research. There are 17 health facilities in the district. The HSAs are grouped according to their health facility. The research is being conducted using a cluster randomized trial design; eight health facilities were randomly assigned to the intervention arm, and nine to the control arm.

The study assesses missed opportunities using the observation of HSA-client interactions. It assesses quality of care using data from the Community Case Management (CCM) checklist; and assesses coverage of key interventions (MNCH+FP) and client satisfaction using data from client interviews. Indices are derived for missed opportunities and quality of care for the relevant categories of interaction.

Findings

Baseline Survey Findings

HSA characteristics: The baseline interviewed 93 HSAs; 49 for the control arm and 44 in the intervention arm. We found that more than a third (37%) of HSAs did not live in their catchment areas. Poor or no suitable accommodation was cited as a main reason, with relocation due to marriage as a second reason for non-residential status. A third of the HSAs (35%) reported being available seven days a week to provide services in their catchment areas. Non-resident HSAs were more likely to have limited availability, 74% of non-resident HSAs compared with 31% of resident HSAs.

Coverage indicators: Among those mothers who delivered within the previous two months, only 10% had received the recommended number of antenatal home visits. Of children 2-23 months old whose mothers reported their having had a danger sign, only a little more than a third (38%) were taken to be seen by the HSA. Of these, only half (50%) were then referred to the health facility. About half of mothers reported having been counseled on family planning during their last visit with the HSA.

Missed Opportunity Index: Overall the median proportion of opportunities missed was 64%. The proportions were similar for all categories of interactions.

Quality of Care: A total of 198 observations of were made using the CCM checklist. Overall, only 7% of children observed during assessment were correctly assessed with no item missed.

Conclusions and Lessons Learnt

The number of clients seen by HSAs on a clinic day was fewer than anticipated, and in some cases the clinics were conducted early (before 7:30 am) and late (after 5 pm) in the day, but not during normal working hours. In some cases, this was because the HSA had other duties at the health facility. The main concern with the smaller volume of data is the feasibility of achieving the planned numbers for the follow up assessments. Sample size calculations need to be reviewed. Data were recorded on forms designed to be scanned using Teleform software. For subsequent rounds of data collection, data are to be captured using tablets. This will guide the collection of data and thereby prevent all of the types of errors.

Recommendations and Use of Findings

These findings will be used as baseline data in the implementation of *Mwayi wa Moyo*. Periodic data will continue to be collected and an endline survey will be conducted after two years to evaluate the impact of the program. The information gathered in the program will be used to inform policy on the effectiveness on integrating health services at the community level.

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For more information about Save the Children: www.savethechildren.org.

ANNEX 5: Reports and Information Products Requested During the SW Consultation

Not applicable.

ANNEX 6: Papers, Presentations, News Coverage about Project and Products

Not applicable.

ANNEX 7: Optional



The Effectiveness of an Integrated Strategy for Community-Based Maternal, Newborn and Child Health and Family Planning Services in Blantyre District, Malawi

Report of Baseline Survey

DRAFT

Mwayi wa Moyo (“A Chance to Live”) Project

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Introduction

An operational research (OR) study is being conducted by investigators from the Departments of Paediatrics and Child Health and the Department of Community Medicine of the College of Medicine in Blantyre, Malawi. Dr. Ajib Phiri is leading the team of other investigators which includes Dr. Bernadette O’Hare and Dr. Sarah White. The OR is embedded within the *Mwayi wa Moyo* (“A Chance to Live”) Project conducted by Save the Children, Malawi, with funding from USAID, in partnership with the Blantyre District Health Office and the Ministry of Health.

The study is a cluster randomised controlled trial to compare two approaches to community-based maternal and neonatal child health and family planning (FP) service provision in hard to reach communities within Blantyre District. Community-based services are provided by Health Surveillance Assistants (HSAs) who typically are expected to live within the community serviced and provide first-line health care services to a population of between 1,000 and 2,000 people. Within Blantyre District, there are 21 Government Health Centres which provide primary health care services. The district is also served by four private hospitals, three Christian Health Association of Malawi (CHAM) member facilities, and over 100 private clinics. The population within the catchment area of a health centre (HC) is serviced by a number of HSAs who are supervised at HCs. Any population which is more than 5 km from the HC is considered hard-to-reach.

Maternal, newborn and child health interventions delivered by the HSAs, are coordinated by different departments and programs within the MOH. The several community-based packages (e.g.: Community Based Maternal Neonatal Child Health, Community Case Management, Community Integrated Management of Childhood Illnesses, and FP) were designed and implemented at different points of time and hence scaled up sporadically in various districts. This vertical and fragmented approach to program design, implementation and management is transmitted down to the district and community levels where health care is delivered. This makes it difficult for HSAs to plan and prioritize their caseloads. It has also contributed to poor integration of service delivery and potentially leads to missed opportunities for delivering multiple services at every interaction between the HSAs and the families, ineffective supervision and mentorship and duplication of efforts. An integrated approach to the delivery of Community Case Management (CCM), MNCH, FP and community mobilization (CM) is being assessed in the study to determine whether it results in reduced, missed opportunities and improved quality and coverage.

The research question being investigated is “Does an integrated approach to community-based health service delivery result in more effective services and the increased use of HSAs by guardians/mothers of children under 5 years old when their child has a fever, cough or diarrhoea, as compared to a fragmented approach?”

The specific objectives of the study are:

1. To determine if the integrated community-based package leads to improved coverage of key interventions;
2. To determine if the integrated community-based package leads to improved quality of care; and

3. To determine if the integrated community-based package leads to improved client satisfaction.

To avoid contamination among adjacent HSAs, they are clustered according to the Health Facility (HF) they serve and randomisation is at the HF level HSAs under eight HFs have been randomly assigned to the intervention arm and nine are continuing with the vertical approach.

Prior to introduction of the integrated approach, a baseline survey was conducted. The objectives were:

1. To estimate the level of missed opportunities prior to the trial in both trial arms.
2. To estimate the coverage of key interventions.
3. To estimate the quality of care.
4. To estimate the level of client satisfaction.
5. To review data used as the basis of sample size calculations.

Methods

All 99 hard-to-reach HSAs (HSAs) within the Blantyre district are included in the OR being implemented by Save the Children, Malawi. There are 17 HFs within the district. The HSAs are grouped according to their HF. The research is being conducted using a cluster randomized trial design; 8 HFs have been randomly assigned to the intervention arm and 9 are in the control arm. Data collection was planned using five data collection activities:

- i) A client satisfaction and understanding interview for mothers of children below two years of age;
- ii) Observation of HSA-client interactions with clients in 7 categories (pre-conception, pregnancy, newborns (0-28 days), infants in three distinct age ranges (29-59 days; 2-5.9 months and 6-23.9 months) and children (2-4.9 years));
- iii) A checklist concerning CCM of an HSA examining/reviewing a child;
- iv) A structured HSA interview; and
- v) A focus group discussion (FGD) with community members of the catchment area of one HSA per HC.

Client Satisfaction and Understanding interviews were conducted using a structured questionnaire (Appendix 1). These were originally planned to be conducted among all of the HSAs within each HF. Clients were to be selected from among the mothers of children under two years old; 50 were to be sampled consecutively as exit interviews from the consultation and 50 were to be randomly sampled from among eligible community members. It was not feasible to survey and sample from all HSAs in the study area. Instead, one HSA was randomly sampled for each HF. Based on population data obtained from Save the Children, it was anticipated that sampling would be needed among the eligible women for most of the HSAs. During mapping to identify eligible mothers, it became apparent that most HSAs did not serve more than 100 such women, contrary to the information used in planning the study. Therefore, all eligible women were asked to participate in the study. No woman refused to participate.

Coverage of key interventions (MNCH and FP) was assessed using data from the Client Satisfaction and Understanding interview. Client satisfaction was also assessed using the same interview. Missed opportunities were assessed using data recorded on a checklist (Appendix 2)

during observation of HSA client interactions. It was planned that ten HSA-client interactions would be observed for each HF for each of the seven stages of interest. Only non-pregnant women with no child under 5 years were to be assessed on pre-conception counselling. Otherwise, when a client and her child/children matched more than one of the categories, data were to be collected for each category.

Within each HF the observations were to be conducted for all of the HSAs within the study area. The numbers of clients seen by HSAs were fewer than anticipated; it was thus not feasible to conduct the planned number of observations. At least one day was spent observing interactions for each HSA. However all HSAs selected were observed with the exception of one, due to a recent change of HSA. The newly appointed HSA was not trained and therefore an alternative HSA under this HF was randomly selected for observation. (The FGD for this HF was conducted in the originally selected HSA's catchment area).

Quality of care was assessed using data recorded using a checklist while observing CCM interactions (Appendix 3). CCM observations were to be completed for two children per HSA. The planned total number of interactions was observed. However the distribution of these was not as planned. The Health HSA-client interaction and the CCM observations were conducted in parallel by two enumerators. To optimize the use of time and transportation resources, CCM was conducted for all Health HSA-client interactions rather than a subset of them. For some HSAs, it was not possible to observe any interactions.

For all 93 HSAs assigned to a post/position, the HSA was interviewed using a structured questionnaire (Appendix 4) and an FGD was conducted using a guide (Appendix 5). FGDs were conducted to establish their knowledge on MNCH and FP. Their perceptions on the status of MNCH and FP services in their community were also documented in these sessions.

Data have been summarized for each of the planned indices, this is done both overall and for each of the two study arms. For the Missed Opportunities Index (MOI), data were captured for between 5 and 16 items from a list of 26 items available for each of the seven categories of interactions. For some items, a sub-item of referral or counselling was assessed when the item itself was not performed. Some items observed were either not applicable or not able to be assessed for some mother/infant pairs in the category, e.g. if there were no danger signs or the mother was not HIV infected. A missed opportunities index was derived using only the items assessed for all women (see Appendix 6 for details). Each item could have a score of between 0 and 1. Where a sub-item was assessed, it carried half the weight of the parent item, thus for example if ANC was provided the item received a score of 0, if the woman was counselled to have ANC it received a score of 0,5 and if ANC was not considered the score was 1. Each item included was weighted equally and converted to a percentage. Thus scores of 0% and 100% would indicate that none and all opportunities were missed for all of the items assessed, respectively. (The questions used in derivation of the index are listed in Appendix 1.) For Quality of Care an index was derived in a similar manner. Sub-indices have also been derived, without standardization, for each of the areas assessed.

Results

Six HSA posts were unfilled at the time of the baseline survey; therefore only 93 are included in this report. Forty-four of these are under the eight HFs assigned to the intervention arm, and 49 are under the nine assigned to the control arm.

Characteristics of HSAs

All 93 HSAs assigned to a post were interviewed; 49 for the control arm and 44 in the intervention arm. The majority (74%) of HSAs are male and two in three (63%) reported that they live within the catchment area of their clinic. Among the 34 (37%) who did not live in their catchment area, the main reasons given were that there is no suitable accommodation (24) and that the spouse lives elsewhere (6; 3 of whom were male).

Although HSAs are expected to be available every day, only 32 (35%) reported to be available seven days per week, including three who had indicated that they are not residents of their catchment area. Nearly half (43) of the HSAs reported that they are available on no more than two days a week; non-resident HSAs were more likely to have limited availability (74% of non-resident HSAs, compared with 31% of resident ones). The median population size reported to be served was 1,600. The median number of times that HSAs reported receiving a supervision in the last 6 months was four, but a quarter of them had received no more than two supervisory visits. Most HSAs were either satisfied or very satisfied (92%) with the supervision they received. Reasons reported for lack of satisfaction were irregularity, slowness and inadequacy. The same proportions were satisfied/very satisfied with the mentoring they received. Half of the HSAs had been trained in or after 2009, a quarter had been trained in or after 2010 and a quarter before 2006.

Client Satisfaction

Client satisfaction interviews were conducted with all identified mothers of children under two years of age for one HSA under each HF. There were a total of 653 in the intervention arm and 816 in the control arm. Characteristics of the women interviewed are summarized in Table 3. If the population was stable and there was no infant mortality, the time since last delivery would be distributed as follows: 8.3% <60 days, 16.7% 2 to <6 months, 25% 6 to <12 months and 50% 12 to <24 months. The deviations observed were consistent with this and some infant mortality.

Coverage Indicators

Less than 10% of women reported to have received the recommended number of antenatal home visits during their most recent pregnancy and fewer than 2.5% reported to have received the recommended number of postnatal home visits (Table 4). Variations observed between these proportions, by study arms and by time since delivery, are typical of random variation. A total of 131 mothers of children aged 2 to <6 months old reported that their child had had a danger sign. Only 38% of these were taken to the HSA. Of these, only 50% had then been referred to the HF (Table 4).

Nearly half (48%) of mothers reported to have been counselled on PPF at the last HSA visit. The proportions were similar for each age of infant considered. A similar proportion of mothers of infants under 2 months old reported currently using FP. The proportions increased to 59% and 68% for mothers of infants 2 to 6 months old and 6 months to 2 years old, respectively.

For only 13 women there was a response regarding whether advice was given; of these only 7 reported that it was and only 4 of these were assessed on their understanding.

Client Satisfaction

Between half and two thirds of women reported to have felt welcomed by the HSA on their last visit (Table 5); the proportion was lowest (51%) for those who delivered within the previous two months and greatest for those who delivered more than twelve months previously (69%). Similar proportions reported to have felt that the problem they'd taken to the HSA had been dealt with and rated the HSA's service to be either good or excellent (rather than needing improvement). A substantial minority (20%) did not give a rating of the HSAs services.

Missed Opportunities Index

A total of 200 HSA – client interactions were observed. Two of these were for pregnant mothers of a child aged 2 to <5 years and thus were assessed for both categories. These were the only women observed during pregnancy. No woman was observed receiving pre-conception counselling and no mothers of newborns (<28 days) were observed. The majority of interactions (101) were for mothers of infants aged 6 months to <2 years. A further 82 were for mothers of children ages 2 to <5 years, 16 were for infants between 2 and <6 months and one was between 1 and 2 months of age. There were missed opportunities for every interaction observed (Table 6). Overall the median proportion of opportunities missed was 64%. The proportions were similar for all categories of interactions.

Quality of Care

A total of 198 CCM cases were observed during examination by the HSA using the CCM checklist. Overall, 9% of children were correctly assessed with no item missed (Table 7). In all cases, the correct decision (refer, treat at home or no treatment) was deemed to have been made. In half of the cases 11% or more of the items were missed, and 19% or more were missed for one in four of the assessments observed. Median numbers of areas assessed or the proportion correct, are indicated for each area assessed (Table 7).

Community Satisfaction

Overall there was good awareness among community members of CCM services, particularly for child growth monitoring, distribution of mosquito nets and water guard, and advice on general hygiene. However in some villages it was perceived that this service is solely for children under 2 years old.

Three aspects of CCM clinics which were favoured/received positive feedback from the community are: their convenience, i.e. ease of access with short distances and no transport costs; the short waiting times; and quality of management similar to that at a HF. It was also mentioned that when the HSA is unable to manage the problem, a referral letter is provided which improves the speed of service at the HF.

A major complaint for some villages was the fact that the HSA does not live in the village; in some cases the HF is more accessible than the CCM clinic. When the HSA is not resident, it is common for the clinic to only be open for two or three days, and for the hours of operation to be short (opening late and closing early). A second complaint was the limited scope of services

available and the narrow range of drugs supplied. Some of the services that the community wanted, were identified through the FGDs and included; FP, antenatal care, and services for children under-5 years old.

It was clear that all HSAs sampled were conducting home visits. Some husbands reported being uncomfortable when a male HSA treated their wives. These husbands were encouraged to escort their wife to the clinic. In contrast, other husbands reported being very supportive of the CCM clinics.

On the whole, family and community members support women attending CCM clinics. In Chilomoni, the chief gave a piece of land for the village clinic to be built, and bricks were moulded, burned and transferred to the site. In Mpemba, Makata, Namikoko clinics are being conducted on the village headperson's property, mostly under a mango tree. However, there were no structures in 11 of the 17 sampled catchment areas. At Chavala, Lundu and Chimembe they have small brick walled grass roofed shelters and at Chikowa there is a grass building at the HSAs premises. In South Lunzu, they are using an unfinished HC building while at Mlambe they occupy a room in a community based organization building. The clinic in Soche is housed in a Save the Children building, used for early childhood development schooling. Reasons mentioned for not taking a child to the CCM clinic for care seeking included: laziness of the mother, lack of HSA availability, religious views and use of traditional medicine.

Each group was asked what would improve CCM and home visits. The clinic and the HSAs' accommodations were highlighted. Three facets of the clinic were mentioned: the structure, resources and management. Lack of a permanent structure mainly affects clinic schedules during rainy seasons. For example, in Makata when it is the rainy season, the clinic moves from under the mango tree to the chief's house. The groups reported that the following resources were needed to improve CCM and home visits: no stock-outs at village clinics and a wider range of available drugs as well as vaccines like ROTA, test kits for malaria, and a bicycle ambulance. Community members expressed the desire that the HSAs focus on providing CCM rather than going to the HC. Community members also reported that HSAs should stick to their schedules, and be encouraged to conduct home visits. Additionally, the age restriction for those receiving treatment at the village clinic should be extended to anyone over five years old.

Volunteers should be given some kind of an incentive to encourage their commitment. Once in a while experts in areas such as dentistry should visit CCM clinics. FP products and services, and other services like care for children under 5 years old and antenatal care, should be made available at the CCM clinic level.

Additionally, in order to improve the operations of village clinics and HSAs, it was suggested that suitable accommodation for HSAs within their communities be provided in order to address the problems of HSAs not residing in the community they serve. HSA residence status was mentioned in the course of each FGD. The information obtained was compared with that reported by the HSA for the 17 participating villages. Nine of the 17 HSAs had reported in interviews that they lived in their catchment area. However, two (22%) of these were found not to be living in their catchment areas (Appendix 7).

Review of Sample Size Calculations

Missed Opportunities Index

When writing the proposal, it was assumed that the MOI would be 60% for the control arm and that a reduction to 40% for the intervention arm would be the minimum reduction to be detectable. The sample size calculation also assumed that the s.d. of variability for the MOI would be 20% and that the MOI is Normally distributed. The baseline survey estimates of the MOI (64% and 67%) are consistent with the assumed level for the control arm. The distribution of MOI is slightly skewed, thus the interquartile range rather than the s.d. was estimated. When a distribution is Normal the IQR corresponds with 1.3 standard deviations. The observed IQRs of 16% and 11% suggest that the standard deviation is in the region of 10% rather than the assumed 20%. The sample required is also influenced by the coefficient of variation. Using the MOI data available this is estimated to be 0.024. This is lower than anticipated. These calculations indicate that if the minimum difference to be detected for the MOI is a 20% reduction, then no more than five observations per cluster are required. However if a difference of 10% would be important to detect, then the planned number of ten observations per cluster should be retained.

Proportion of <5 year children with fever, ARI or diarrhoea brought promptly to HSA

It was anticipated that 24% of mothers of children under 5 years old would seek care from their HSA. The baseline survey only obtained information on children under 2 months of age. Approximately 50% of mothers of children aged 2 to <6 months old reported their child to have had a danger sign before 2 months of age. Among those who had a danger sign, 38% were taken to see the HSA. Sample size calculations focused on detection of an increase of 16% from 24% to 40% in the proportion taken to see the HSA. The baseline level is higher than anticipated but it is in a narrower younger age range; the level among a wider and older age range may be lower. However, if the level is higher than anticipated but the same difference is to be detected, the number required will need to be increased. If the level is 38% in the control arm and the level rises by 16% the sample size would need to increase by 13%. The original sample size calculations assumed that the coefficient of variation would be 0.16; this matches the value derived from the data. The planned sample size of 20 pairs for whom the child has had a danger sign thus needs to be sampled per cluster. The level in each arm should be reviewed at the first round of data collection (6 months) to obtain more relevant estimates and guide on whether the level is as anticipated or higher; if it is higher the sample size may need to be increased.

The proportion of mother/newborn pair who received the recommended number of antenatal and postnatal home visits (up to 60 days postpartum)

As anticipated, the percentage of mother/neonate pairs who received **all** the recommended home visits was below 10%. For the data available, the coefficient of variability is estimated to be 0.25. Initial calculations assumed a value of 0.16. If the coefficient is this high there will still be more than 80% power to detect the planned minimum increase to 25% if 20 mother/child pairs are sampled.

Number of newborns and young infants (<60 days) with at least one danger sign referred by an HSA to HF

The original proposal planned to calculate the sample size for this indicator after completion of the baseline survey. In the baseline survey, 265 mother/infant pairs aged 2 to <6 months were

sampled; of these 50 were taken to the HSA with danger signs and 50% of these were referred to the HF. Guidance on the difference to be detected is needed for calculations to be performed.

Proportion of mothers of children 0-23 months old who were counselled on PPF

The original proposal planned to calculate the sample size for this indicator after completion of the baseline survey. In the baseline survey, 48% were counselled during their last visit to the HSA. Guidance on the difference to be detected is needed for calculations to be performed.

Discussion

For our study population, less than 10% of women received the intended numbers of antenatal (3) or postnatal (4) home visits. In 2010, only 45% of rural women who had delivered in the previous five years reported to have had four or more ANC visits [1]. Although these figures concern differing aspects of maternal health care delivery they both demonstrate an unacceptably high shortfall in service delivery in one of the Millennium Development Goals.

Approximately half of the women with children under 2 years of age were using a FP method; this rate is similar to the proportion of rural married women who reported use of any contraceptive method (44.5%) in 2010 [1]. However the latter includes women whose most recent pregnancy was more than two years prior who may therefore be expected to have a lower need for contraceptive use.

During interviews, 37% of the HSAs reported not living in their catchment area. However, of the eight HSAs who reported living in their catchment area and for whom an FGD, was conducted 22% were found to not resident in their village. Thus it is likely that the proportion of HSAs, in the entire sample, who do not live in their catchment area is underestimated. The proportion is likely to be no more than half.

Limitations

The volume of data collected

The population served by each of the HSAs proved to be smaller in many cases than anticipated. This simplified the collection of data concerning client satisfaction interviews as there was no need to map and sample from within the catchment area.

The number of clients seen by HSAs on a clinic day were fewer than anticipated; and in some cases the clinics were conducted early (before 7:30am) and late (after 5pm) in the day but not during normal working hours. In other cases, the HSA had duties at the HF. Additionally, there were problems scheduling and conducting observations and interviews with 10 of the 17 HSAs. For two of these, data collection was not successful on the first revised date, and a further re-scheduling was necessary.

The main concern with the smaller volume of data is the feasibility of achieving the planned numbers for the follow up assessments. Sample size calculations need to be reviewed.

Errors in the database

Data were recorded on forms which had been designed to be scanned using Teleform software. The system has been in use among various projects in the College of Medicine for about three

years. However none of the project members had experience using the system for data capture. Data Management was sub-contracted to the Data Management Unit of the Research Support Centre. Data processing and cleaning proved more tedious and complex than anticipated. Five main problems were encountered:

1. In some cases the data collection form used was a draft version; this could not be scanned and had to be transferred to a valid form;
2. In some of the forms for observation of an HSA-client interaction the data were recorded in an incorrect column, e.g. first under “young infant” (28-59 days old) but then for later rows on the form under “infant” (6- <24 months old);
3. Some forms were not scanned in the original database provided;
4. A few forms were duplicated; and
5. There were some errors in the reading of data from the forms, e.g. 2s were sometimes read as 7s.

When any of these problems were identified they were corrected. However problems related to #5, reading the data from the forms, need further investigation. Some errors were identified in the values in the database for parity and gravidity because large differences in their values were queried. On checking 22 forms in which one had a value of 7 and the other a value of 1 or 2 it was found that 18 of the 7s were really 2s, two of them were really 1s and two 2s were really 7s. The quality of the scanning and reading of other numbers in the database which have not been checked is certain to have some errors. Such errors will have reduced the precision of estimates obtained. The quality of the data should be checked by randomly selecting some forms and comparing these with the data captured in the database to estimate the error rates.

For subsequent rounds of data collection, data will be collected using Tablets. This will guide the collection of data and thereby prevent all types of errors listed above from occurring. Data recording errors will however still be possible. The occurrence of such errors can only be addressed by ensuring that enumerators are adequately trained and monitoring their performance.

Six items (11 fields) considered in the observation of HSA-client interactions were replicated in the form design and where completed for multiple interactions (e.g. pregnant mother and child aged 3 years) the responses should have been identical. Although data were only captured for two women who were in more than one category, data were often recorded in the wrong column. In some cases, a response was recorded under multiple columns and there were discrepancies among the responses within a row, although they should have been identical.

For the CCM, data were not collected concerning applicability of three items. Where the response was missing, these were assumed to be correctly omitted (139 cases were not asked if the child was vomiting everything, 39 cases were not assessed concerning measurement of respiratory rate and 20 cases did not use a MUAC tape, these were required if the child had been vomiting, had a cough or was > 6 months, respectively). For the derivation of the index, these data were omitted from the denominator to provide a more robust measure of the level of completion.

Conclusions and Lessons Drawn/Learned

During the baseline survey, the number of clients seen by HSAs on a clinic day were fewer than anticipated; in some cases the clinics were conducted early (before 7:30 am) and late (after 5 pm) in the day, but not during normal working hours; in some cases the HSA had duties at the HF.

There were problems scheduling and conducting observations and interviews with 10 of the 17 HSAs. For two of these, data collection was not successful on the first revised date, and a further re-scheduling was necessary.

Although the data collected were from fewer respondents than planned, the estimates obtained suggest that the study design planned will have adequate power to detect important benefits in the use of the integrated package, if it is of benefit. However the feasibility of achieving the planned numbers for the follow up assessments is a concern. Sample size details need to be reviewed.

Data were recorded on forms which had been designed to be scanned using Teleform software. For subsequent rounds of data collection, data are to be captured using Tablets. This will guide the collection of data and thereby prevent most types of data collection errors which occurred in the baseline study.

References

- 1 National Statistical Office (NSO) and ICF Macro. 2011. *Malawi Demographic and Health Survey 2010*. Zomba, Malawi, and Calverton, Maryland, USA: NSO and ICF Macro.

Summary of Data Collected

Health Facility	Number of HSAs	Number of client satisfaction interviews	Number of observed HSA-client interactions	CCM checklist used	FGD done and HSA interviewed
Planned numbers / Health Facility	all	100	70	2/HSA	1
Lirangwe (1)	3	56	19	18	Yes
Chilomoni (2)	3	88	9	9	Yes
Limbe (3)	10	107	1	1	Yes
South Lunzu (4)	10	63	16	16	Yes
Mpemba (5)	6	70	18	18	Yes
Madziabango (6)	4	104	6	6	Yes
Chikowa (7)	5	103	12	12	Yes
Chileka SDA (8)	5	97	3	3	Yes
Mdeka (9)	5	82	13	13	Yes
Dziwe (10)	6	103	6	6	Yes
Soche (11)	5	57	2	2	Yes
Makata (12)	9	104	36	35	Yes
Namikoko (13)	3	84	17	17	Yes
Chabvala (14)	4	105	13	13	Yes
Lundu (15)	7	54	17	17	Yes
Chimembe (16)	4	101	2	2	Yes
Mlambe (17)	4	91	10	10	Yes
Total	93	1,470	200	198	17

Summary of characteristics of HSAs interviewed, by study arm

Characteristic	Overall (n=93)	Control (n=49)	Intervention (n=44)
Supervised by HSHA	92 (99%)	49 (100%)	43 (98%)
Gender: male	69 (74%)	34 (69%)	35 (80%)
Do not live in catchment area	34 (37%)	13 (27%)	21 (48%)
Lack of suitable accommodation	24 (70%)	8 (62%)	16 (76%)
Spouse lives elsewhere	6 (18%)	2 (15%)	4 (19%)
Available 1-2 days / week (non-resident)	43 (25)	23 (9)	20 (16)
Available 7 days / week (non-resident)	32 (3)	19 (1)	13(2)
Population served: median (IQR)	1,600 (1,100 – 2,339)	1,487 (993 – 2,225)	1,732 (1,259 – 2,339)
Number of times supervised in last 6 months: median (IQR)	4 (2 – 6)	4 (2 – 6)	4 (2 – 5)
Very satisfied with supervision	38 (41%)	19 (39%)	19 (43%)
Satisfied with supervision	47 (51%)	25 (51%)	22 (50%)
Reasons not satisfied: irregular / not adequate/ slow	7 (8%)	5 (10%)	2 (5%)
Mentored	90 (97%)	48 (98%)	42 (97%)
Very satisfied with mentoring	50 (57%)	25 (51%)	25 (57%)
Satisfied with mentoring	35 (38%)	20 (41%)	15 (34%)
Year when trained as HSA: median (IQR)	2009 (2006-2010)	2009 (2007-2010)	2009 (2000-2009)

Summary statistics concerning women interviewed in client satisfaction interviews, by study arm

Characteristic	Overall (n=1,470)	Control (n=816)	Intervention (n=653)
Number (%) currently pregnant	26/1,294 (2.0%)	11/700 (1.6%)	15/594 (2.5%)
Number (%) of pregnant women primigravid	3/25 (12%)	1/10 (10%)	2/15 (13%)
Number (%) Primiparous	348/1,457 (23.9%)	182/807 (22.6%)	166/649 (25.6%)
Number (%) delivered within last 2years ^b	1,432	794	637
Last 60 days	87 (6.1%)	49 (6.2%)	38 (6.0%)
2 to <6 months ago	266 (18.2%)	145 (18.3%)	120 (18.8%)
6 to <12 months ago	413 (28.8%)	224 (28.2%)	189 (29.7%)
12 to <24 months ago	667 (46.6%)	376 (47.4%)	290 (45.5%)

Summary of baseline measures of coverage of key interventions, by study arm and months since last delivery

	Control				Intervention			
	< 2 (n=49)	2-6 (n=145)	>6 -12 (n=224)	>12 (n=376)	< 2 (n=38)	2-6 (n=120)	>6 - 12 (n=189)	>12 (n=290)
Proportion of mothers who received at least 3 antenatal home visits	6 (12%)	11 (7.6%)	16 (7.1%)	25 (6.7%)	3 (8%)	4 (3.3%)	14 (7.4%)	25 (8.6%)
Proportion of mother/newborn pairs who received at least 4 postnatal home visits	Not applicable	1 (0.7%)	2 (0.9%)	8 (2.1%)	Not applicable	1 (0.8%)	5 (2.7%)	7 (2.4%)
Proportion of mother/newborn pair who received the recommended number of antenatal and postnatal home visits		1 (0.7%)	2 (0.9%)	4 (1.0%)		1 (0.8%)	3 (1.6%)	6 (2..1%)
Number of newborns and young infants (<60 days) who had at least one danger sign		75 (52%)				56 (47%)		
Number reported seen by HSA		31 (41%)				19 (34%)		
Number referred by HSA to health facility		13 (42%)				12 (63%)		
Proportion of mothers counselled on post-partum FP at last visit	27 (55%)	59 (41%)	112 (50.0%)	193 (51.3%)	14 (37%)	54 (45%)	80 (42%)	147 (50.7%)
Proportion of mothers using any FP	20 (41%)	87 (60%)	142 (63.4%)	239 (63.6%)	21 (55%)	70 (58%)	135 (71.4%)	201 (69.3%)

Summary of assessment of client satisfaction, by study arm and months since last delivery

	Control				Intervention			
	< 2 (n=49)	2-6 (n=145)	>6 -12 (n=224)	>12 (n=376)	< 2 (n=38)	2-6 (n=120)	>6 - 12 (n=189)	>12 (n=290)
Proportion who felt welcomed by HSA on last visit	22 (45%)	89 (61.4%)	136 (60.7%)	270 (71.8%)	22 (58%)	74 (61.7%)	129 (68.3%)	189 (65.2%)
Proportion who felt their problem had been dealt with	18 (37%)	85 (58.6%)	133 (59.4%)	261 (69.4%)	23 (61%)	68 (56.7%)	136 (72.0%)	179 (61.7%)
Proportion who rated the HSAs service to be excellent*	10 (20%)	39 (26.9%)	66 (30.4%)	134 (35.6%)	15 (40%)	29 (24.2%)	66 (34.9%)	113 (39.0%)
Proportion who rated the HSAs service to be good*	14 (29%)	40 (27.6%)	62 (27.7%)	132 (35.1%)	9 (24%)	35 (29.2%)	72 (38.1%)	91 (31.4%)

* Respondents were asked “How do you rate the service of the HSA?” Options for recording responses were excellent, good, needs improvement or other

Summary of Missed Opportunities, by time since last delivery and study arm

	Category	Pre-conception	Pregnancy	Newborns (0-28 days)	Infants (29-59 days)	Infants (2 – <6 months)	Infants (6 - <24 months)	Child (2 - <5 years)	Overall (all combined)
Number of women	Total	0	2	0	1	16	101	82	200
	Control	.	1	.	0	8	58	50	116
	Intervention	.	1	.	1	8	43	32	84
Proportion for whom no opportunity was missed	Total	.	0%	.	0%	0%	0%	0%	0%
	Control	.	0%	.	.	0%	0%	0%	0%
	Intervention	.	0%	.	0%	0%	0%	0%	0%
Index of missed opportunities: median (IQR)	Total	.	100%	.	75%	65% (12.5%)	62.5% (8%)	64% (9%)	64% (14%)
	Control	.	100%	.	.	65% (12.5%)	58% (17%)	64% (9%)	64% (16%)
	Intervention	.	100%	.	75%	67.5% (20%)	67% (8%)	68% (9%)	67% (11%)

Summary of quality of care, by study arm

Area / number of items	Statistic	Overall (n=198)	Control (n=115)	Intervention (n=83)
Information / 11	median (IQR)	10 (1)	10 (1)	10 (2)
	% completely correct	24.2%	24.3%	24.1%
Signs / 6	median (IQR)	6 (1)	6 (1)	6 (1)
	% completely correct	55.6%	54.8%	56.6%
Classification & decision making/ 3	% completely correct	93.4%	93.0%	94.0%
Pre-referral treatment no. /3	Number (%)	14	9 (7.8%)	5 (6.0%)
	Median (IQR)	3 (2-3)	3 (2-3)	3 (2-3)
Home treatment /5	Number	165	92 (80.0%)	73 (88.0%)
	Median (IQR)	5 (4-5)	5 (4-5)	5 (4-5)
Advice for home care / 1	Number	19	14 (12.2%)	5 (6.0%)
	% correct	73.7%	85.7%	40.0%
CCM Index	Median (IQR)	89 (81-95)	89 (84-93)	89 (74-96)
	% completely correct	8.6%	3.5%	15.7%

Client Satisfaction Interview Questionnaire

 6197		Client Satisfaction and Understanding interview	
Is this an exit interview or a community based interview? <input type="checkbox"/> Exit <input type="checkbox"/> Community			
Health Facility: <input type="text"/>		Village: <input type="text"/>	
Date: <input type="text"/>		CID: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
HSA Supervisor <input type="checkbox"/> SHSA <input type="checkbox"/> AEHO <input type="checkbox"/> Community health <input type="checkbox"/> Nurse <input type="checkbox"/> Other (specify) <input type="text"/>			
Is the woman pregnant? <input type="checkbox"/> Yes <input type="checkbox"/> No		If yes, what is the expected delivery date? <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
If not known, what was the date of the last menstrual period? <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		DD MM YY	
Has the woman delivered a child in the last 5 years? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If yes, what was the date of birth? <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		DD MM YY	
Is the child alive? <input type="checkbox"/> Yes <input type="checkbox"/> No		If yes calculate age <input type="text"/> <input type="text"/> Months	
If no when did s/he die? <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		DD MM YY	
Parity <input type="text"/> <input type="text"/>		Gravity <input type="text"/> <input type="text"/>	
1 Have you met this HSA before?		<input type="checkbox"/> Yes <input type="checkbox"/> No	
1a If yes, when did you last meet the HSA? (check passport) If pregnant and has no previous pregnancy go to 2		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
1b Did you receive any home visit from the HSA during your most recent pregnancy?		<input type="checkbox"/> Yes <input type="checkbox"/> No	
If yes how many?		<input type="text"/> <input type="text"/>	
1c Did you receive any home visit from the HSA after your most recent delivery?		<input type="checkbox"/> Yes <input type="checkbox"/> No	
If yes how many?		<input type="text"/> <input type="text"/>	
1d Did you visit the Health Centre after delivery?		<input type="checkbox"/> Yes <input type="checkbox"/> No	
If yes how many?		<input type="text"/> <input type="text"/>	
2 Did you feel welcomed by your HSA today/on your last visit?		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3 Did you take a problem to the HSA today/during most recent visit? (if no, go to 4)		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3a Do you feel the problem you came with/went to the HSA with has been dealt with?		<input type="checkbox"/> Yes <input type="checkbox"/> No	
How do you rate the service of the HSA		<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> need improvement <input type="checkbox"/> other	
4a If child born 2-6 months ago; did your child have any danger signs before 2 months of age?			
<input type="checkbox"/> fever		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> cough		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> convulsions		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> dehydration		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> lethargy		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> diarrhoea		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> pneumonia		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4b If so was the child seen/reviewed by the HSA?		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4c Was the child referred to the Health Centre?		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4d Where did u first seek assistance?		<input type="checkbox"/> Traditional Healer <input type="checkbox"/> Drug store <input type="checkbox"/> HSA/Village clinic <input type="checkbox"/> Other	



Client Satisfaction and Understanding interview

6197

5	Did the HSA refer your child to the Health Centre or hospital? (if no go to 5f)							
5a	Why were you referred? <input type="text"/>							
5b	Where were you referred to? <input type="checkbox"/> Health Centre <input type="checkbox"/> GECH <input type="checkbox"/> Other (specify) <input type="text"/>							
5c	Were you told to go urgently? <input type="checkbox"/> Yes <input type="checkbox"/> No							
5d	Do you plan to/Did you go as advised? (if yes go to 6) <input type="checkbox"/> Yes <input type="checkbox"/> No							
5e	If not, why not? (go to 6) <input type="text"/>							
5f	If not referred do you plan to/did you take your child to the HC or hospital? if this is a community interview go to 9 <input type="checkbox"/> Yes <input type="checkbox"/> No							
6	Was medication given (if no, go to 7) <input type="checkbox"/> Yes <input type="checkbox"/> No							
		Paracetamol	Cotrim	ORS	Einc	LA	Other	Fully correct
6a	If yes what medicine was given?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Yes <input type="checkbox"/> No <input type="checkbox"/>				
6b	What is/was this medicine for?	<input type="text"/>	<input type="text"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>				
6c	How many times/day are you/were you to administer this medicine?	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> as required	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> as required	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> as required	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> as required	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> as required	<input type="text"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
6d	How much of this medicine are you/were you to use for each dose? (record no. of tablets, eg 1/4)	<input type="checkbox"/> 1/4 <input type="checkbox"/> 1/2 <input type="checkbox"/> 3/4 <input type="checkbox"/> 1	<input type="checkbox"/> 1/4 <input type="checkbox"/> 1/2 <input type="checkbox"/> 3/4 <input type="checkbox"/> 1	<input type="checkbox"/> 1/4 <input type="checkbox"/> 1/2 <input type="checkbox"/> 3/4 <input type="checkbox"/> 1	<input type="checkbox"/> 1/4 <input type="checkbox"/> 1/2 <input type="checkbox"/> 3/4 <input type="checkbox"/> 1	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1/4 <input type="checkbox"/> 1/2 <input type="checkbox"/> 1 <input type="checkbox"/> 2	Yes <input type="checkbox"/> No <input type="checkbox"/>
6e	Did the HSA tell you that there any side effects with medicine? if yes, what are they?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Yes <input type="checkbox"/> No <input type="checkbox"/>				
6f	For how long are you/were you to use this medicine?	<input type="text"/> days	<input type="text"/> days	Yes <input type="checkbox"/> No <input type="checkbox"/>				
6g	If you/your child does not recover were you told what to do? <input type="text"/>							
Advice given to mother								
7	Did your HSA give you some advice? <input type="checkbox"/> Yes <input type="checkbox"/> No							
8	Can you tell me what you understood of the advice you received? <input type="checkbox"/> Fully understood, intends to take advice <input type="checkbox"/> Partially understood <input type="checkbox"/> Little understanding of advice given							
9	Did your HSA discuss use of family planning with you? <input type="checkbox"/> Yes <input type="checkbox"/> No							
10	Are you using any family planning method? if yes, what method are you using? <input type="checkbox"/> LAM/PPFP <input type="checkbox"/> Depo <input type="checkbox"/> Condom <input type="checkbox"/> Other							
10b	If no Do you know where to access family planning? <input type="checkbox"/> Yes <input type="checkbox"/> No							
11	Was the woman's health passport available to verify response? <input type="checkbox"/> Yes <input type="checkbox"/> No							
Enumerator id no.:		<input type="text"/>		Signature:		<input type="text"/>		

HSA Interview Questionnaire

 57223		HEALTH SURVEILLANCE ASSISTANT INTERVIEW GUIDE	
Health Facility: <input type="text"/>		Village: <input type="text"/>	
Date: <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/>		HSA Supervisor: <input type="checkbox"/> SHSA <input type="checkbox"/> AEHO <input type="checkbox"/> Community health nurse <input type="checkbox"/> other: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
HSA Supervisor's name: <input type="text"/>			
A DEMOGRAPHICS			
1 Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female			
B GENERAL			
2 Are you resident in your catchment area?: <input type="checkbox"/> Yes <input type="checkbox"/> No (if yes go to 4)			
3 If no, what are the reasons for this? <input type="checkbox"/> No suitable accommodation <input type="checkbox"/> spouse lives elsewhere <input type="checkbox"/> other (specify)/(then go to 5) <input type="text"/> <input type="text"/>			
4 If yes, are you sometimes awakened at night to see a sick child? <input type="checkbox"/> Yes <input type="checkbox"/> No			
5 How many days in a week are you available for your catchment population? <input type="text"/> <input type="text"/> Days/Week			
6 How many villages do you attend to? <input type="text"/> <input type="text"/>			
7 How big is your catchment population? <input type="text"/>			
8 Do you know the difference between supervision and mentorship? <input type="checkbox"/> Yes <input type="checkbox"/> No			
C SUPERVISION			
9 How many times were you supervised in the last 6 months? <input type="text"/> <input type="text"/>			
10 Were you supervised in the last 3 months? (if no go to 11) <input type="checkbox"/> Yes <input type="checkbox"/> No			
11 Which activities are you supervised on? please tick <input type="checkbox"/> Community mobilisation <input type="checkbox"/> Community Based Maternal and Neonatal Child Health <input type="checkbox"/> Family Planning <input type="checkbox"/> Growth monitoring <input type="checkbox"/> EPI <input type="checkbox"/> CCM <input type="checkbox"/> Water and sanitation <input type="checkbox"/> Nutrition <input type="checkbox"/> if other please specify: <input type="text"/>			
12 Are you satisfied with the supervision that you get? <input type="checkbox"/> Very satisfied <input type="checkbox"/> Satisfied <input type="checkbox"/> not satisfied (if at least satisfied go to 14)			
13 If you are not satisfied with the supervision that you get, please state the reasons <input type="text"/> <input type="text"/>			
D MENTORSHIP			
14 Do you get mentored on the work that you do? (if no go to 16) <input type="checkbox"/> Yes <input type="checkbox"/> No			
15 If yes what are you mentored on? <input type="checkbox"/> Community mobilisation <input type="checkbox"/> Community Based Maternal and Neonatal Child Health <input type="checkbox"/> Family Planning <input type="checkbox"/> Growth monitoring <input type="checkbox"/> EPI <input type="checkbox"/> CCM <input type="checkbox"/> Water and sanitation <input type="checkbox"/> Nutrition <input type="checkbox"/> if other please specify: <input type="text"/>			



57223

HEALTH SURVEILLANCE ASSISTANT INTERVIEW GUIDE

16 Are you satisfied with the mentorship that you get? Very satisfied satisfied not satisfied
 (if at less satisfied go to 17)
 if you are not satisfied with the mentorship that you get, please state
 the reasons?

17 When were you trained to be a HSA? record the month and year. Month Year

18 When did you last receive training in each of the program
 areas? (record the month and year)

<input type="checkbox"/> Community Based Maternal and Neonatal Child Health	<input type="text"/> <input type="text"/> Month	<input type="text"/> <input type="text"/> Year
<input type="checkbox"/> Family Planning	<input type="text"/> <input type="text"/> Month	<input type="text"/> <input type="text"/> Year
<input type="checkbox"/> Community mobilisation	<input type="text"/> <input type="text"/> Month	<input type="text"/> <input type="text"/> Year
<input type="checkbox"/> Growth monitoring	<input type="text"/> <input type="text"/> Month	<input type="text"/> <input type="text"/> Year
<input type="checkbox"/> EPI	<input type="text"/> <input type="text"/> Month	<input type="text"/> <input type="text"/> Year
<input type="checkbox"/> CCM	<input type="text"/> <input type="text"/> Month	<input type="text"/> <input type="text"/> Year
<input type="checkbox"/> Water and sanitation	<input type="text"/> <input type="text"/> Month	<input type="text"/> <input type="text"/> Year
<input type="checkbox"/> Nutrition	<input type="text"/> <input type="text"/> Month	<input type="text"/> <input type="text"/> Year

Enumerator id no.: Signature: _____

Focus Group Discussion Guide

Introduction

Welcome! Thank you for taking time to be part of the focus group discussion today; your time and expertise are greatly appreciated. My name is (insert name) and I am (Doctor or Clinical Officer). My colleagues and I are conducting a series of focus group discussions to gain insight into your understanding on maternal, child health and FP issues. You are being asked to participate in the focus group today because of your roles in issues affecting maternal and child health in your village. As members of this community, your perspective regarding issues of maternal and child health is extremely valuable. We will use the information you provide to make recommendations for improvements to the health of mothers and children in Malawi.

Your participation in this focus group discussion is completely voluntary. You do not have to participate if you do not want to. We will be recording the discussion so that we can later summarize the information. However individual names will not be identified, nor will your name be linked with your response. All answers will be kept confidential.

I'd like to emphasize that there is no "right" or "wrong" answer to the questions: we are most interested in your experiences, opinions, and ideas, and welcome all of your input. In fact you may find that you disagree with the opinion of another person in the discussion. That is okay, and I hope you will say so when that happens in a polite and respectful way. You may also change your mind in the middle of the discussion, perhaps as a result of something someone else has said, and I hope again you will say so, if and when that happens.

Because we want to respect everyone and make sure that everyone is heard, we have one basic rule in this session – we will allow only one person to speak at a time. We want to have an organized session, and in order to do this, I ask that you respect the person who is speaking, and wait for her/him to finish her/his thoughts.

Do you have any questions for me before we get started?

Let's start by introducing ourselves. We will go around the so that each person can state her name.

Group Experience

1. What is your experience with the CCM clinic
2. What do you like most about the CCM clinic? What do you like the least?
3. What is it different to get services at the CCM clinics as compared to getting the same services from elsewhere? (For example, past experiences you've had with your sick child, or child immunization?)
4. What has been your experience with home visits by HSAs?

Outsider Perspectives

1. Do the others in your community know about the CCM clinics?
 - If so, what do they think about the CCM clinics?
2. Do you know any mother who was visited by an HSA during pregnancy?
 - If so, what do they think about these visits?
3. Do you know any mother who has been visited by an HSA after delivery?

- If so, what do they think about these visits?
- 4. Do you get support from families and friends to attend CCM clinics
- 5. Are there other women in your community who choose not to go to the CCM clinics? Why do you think they choose not to go to these clinics?
- 6. Are there other women in your community who choose not to be visited by HSAs after delivery or during pregnancy? Why do you think they choose not to be visited by the HSAs?

Improvements

Given the opportunity, what do you think would make the CCM and HSA home visits better?

Questions included in derivation of Missed Opportunities Index for each category of interaction

Item included*	Pregnancy	Newborns (0-28 days)	Infants (29-59 days)	Infants (2 – <6 months)	Infants (6-<24 months)	Child (2-<5 years)
ANC / C	Y					
Vaginal discharge		Y				
LAM and PFP		Y	Y	Y	Y	Y
FP spacing interval chosen / C		Y	Y	Y	Y	Y
HIV status established / C	Y	Y	Y	Y	Y	Y
Use of ITNS / C	Y	Y	Y	Y	Y	Y
Nutrition	Y	Y	Y	Y	Y	Y
TTV / R	Y					
VDRL / R	Y					
Birth plan / C	Y					
IPTp / C	Y					
Assessment of danger signs		Y	Y	Y	Y	Y
Immediate referral		Y	Y	Y	Y	Y
Breastfeeding well / C		Y	Y	Y	Y	Y
Complementary feeds at 6 months hygienically prepared / C					Y	
Use of ITN		Y	Y	Y	Y	Y
Is vaccination up to date? / C		Y	Y	Y	Y	Y
Has Vitamin A been given? / R					Y	Y
Number of items	8	11	10	10	12	11

* C indicates that counselling was an alternative option; R indicates that referral was an alternative option in the event that the action was not complete; these options are only partial completion of the task.

Y indicates that the question is used; a blank indicates that it was not.